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VOL. XIV No. 3

VERMONT

Quarterly



RAILROADS OF VERMONT

PROCEEDINGS:
VERMONT HISTORICAL SOCIETY
July, 1946

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The editor is greatly indebted, in drawing together this "railroad issue," for the assistance given him by Colonel William J. Wilgus, Professor Richard C. Overton, and Mr. Frank Wilder. Colonel Wilgus, a Curator of the Society, is known to all our readers. Professor Overton is a native of Dorset, where he still has a home, and is now professor of railway economics at the School of Commerce, Northwestern University. He is a long-time student of Vermont railroads. Mr. Wilder is a hotelman, and more lately an artist, of wide reputation.

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EARLE WILLIAMS NEWTON, *Editor*, MONTPELIER

Printed and made in the United States of America by E. L. Hildreth & Company, Inc.

Publication Office: 8 Harmony Place, Brattleboro, Vermont

\$3.00 A Year

Published Quarterly

75 Cents A Copy

Subscription included in annual membership dues: \$2.00

GENERAL OFFICE: MONTPELIER, VT.

Entered as second-class matter December 23, 1937, at the post office at Brattleboro, Vermont, under the Act of August 24, 1912.

Vermont Quarterly

1946

NEW SERIES

JULY

VOL. XIV No. 3

THE FOUNDING OF THE RUTLAND RAILROAD¹

As re-created by

WILLIAM E. NAVIN, *Trustee*

Rutland Railroad Company

HISTORY best is told by recreating the actual scene, amid surroundings of the time and in the atmosphere of the event.

Accordingly, I suggest that now, in spirit, we betake ourselves back to the dignified quarters at Montpelier of Governor Mattocks, upon this first day of November in the Year of Grace 1843:

Amid piles of state papers—Senate and House bills of the current legislative session awaiting the Governor's signature—lay *two books* which had gained place as John Mattocks' trusted companions.

The first, small in stature but large in wisdom, was "*Walton's Vermont Register and Farmer's Almanac—with astronomical calculations,*" in the edition for 1843. The book was well thumbed by distinguished thumbs.

More than one Vermont leader had recourse to its sage advice. It appeared never to fail them.

Affectionately, The Governor took up the small, compact, wise *Farmer's Almanac*. The pages breathed of Vermont's tilled soil and barns and farmyards; of the seasons and their appointed tasks; of mountain valley and grazing meadow; of copse and woods; of orchard and truck patch and garden. The book was an all-knowing counsellor upon many a Vermont farm: cherished, consulted, revered. Always was its advice heeded. Sometimes its "astronomical calculations" had been known to prove uncanny in their weathery predictions. As-

1. Extracted from an address given before the American Branch, Newcomen Society, November 1, 1943.

tronomy occasionally led Agriculture by the hand. Vermont's acreage looked to the stars.

Opening at random, a first item met the Governor's eye:

Hurrah for the Sugar-Orchard! *Let the Sunny South boast her sugar-cane, and the West her beet or corn-stalk sugar; but we Green Mountain Boys will stand by the Rock Maple—no unfit emblem for our hardy mountaineers and the sweetest mountain nymphs to be found the whole world over. Stick to the maple; and so long as the maple forests stand, suffer not your cup to be sweetened by the blood of slaves.*

Turning the pages and found following the *Almanac's* exposition of the truthful adage "*A good housewife is one of the first blessings in the economy of life,*" the distinguished Chief Executive next read:

May is a busy month: fences and gates to be repaired—fruit trees to be grafted—all farming utensils to be put in apple-pie order, if not left so in the fall,—the fields to be broken up, and the seed to be put into the ground; but do all your work well. That is the main point, on which, next to Providence, all the hopes of a happy season and fruitful harvests must depend.

Vermont was doing its work well, this year of 1843, and had realized the hopes of a happy season and fruitful harvests. John Mattocks recalled his own words, again in the Governor's Message, reporting two weeks ago to the legislature. His words were these:

We have a fertile soil and industrious habits, which enable us to surpass any other state in the Union, according to our population, in the value of our agricultural production.

The *Farmer's Almanac* continued:

Working Cattle,—These faithful creatures must receive increased attention and care, be well fed, regularly cleansed, and bedded at night.

The advice rang true, in these homely injunctions as to the care of Vermont's brethren of the yoke! They were a working multitude. Vermont depended upon them in the 1840's.

Found upon *Page 20* were words concerned with the abundant labors of the Vermont harvest:

August: *The labors of the harvest are at hand: hire Tem-*

perance and Gratitude for your assistants; they are cheerful fellows, lighten every man's burden, and cost nothing. Our word for it, those big-bellied jugs are awkward and unprofitable fellows any where.

The Governor thought a moment of big-bellied jugs.

September and onions next engaged the Governor's attention, as he continued to read:

September: *Remember your ways. The law for the repairs of highways and bridges is to be attended to about these days.* Onions,—*If onions be planted in the same hill with vines, it is said they will protect the latter from the depredations of the striped bug.*

What he had read so far were precepts for the outdoors. The Governor's concluding item found in the *Almanac* had to do more intimately with the Vermont farmer himself:

Silk being a non-conductor of electricity, is excellent material for dress. One of the primary causes for the languor which is felt in damp weather is said to be the damp atmosphere robbing us of our electricity—which a medical writer calls the buoyant cordial of the body. Those, therefore, who are apt to be spiritless in damp weather are recommended to wear silk waistcoats, drawers, and stockings.

The Governor took a deep breath.

Zadock Thompson, A.M., centered his interest in history, in the natural sciences, and in the higher mathematics. Astronomy, in its simpler form, was not outside his purview. From another angle, he might have been termed by the great John Stuart Mill *an economist*. Certainly Thompson had a lively and intelligent interest in factors, human and material, which likely would affect Vermont's future. He had spent his life among Vermonters. Since 1824, he had come to be looked upon by them as a sort of "patron saint" of the Green Mountain State, in the pursuits of knowledge, erudition, and wisdom. Thirteen months before, in October 1842, he had published at Burlington with aid of Chauncey Goodrich, his masterpiece. It was a thick, impressive-looking volume, and Zadock Thompson, Master of Arts, modestly had entitled it "*History of Vermont—Natural, Civil and Statistical.*"

It was this book which, along with the *Farmer's Almanac* for 1843, found its being this November afternoon amid piles of state papers upon

the Chief Executive's desk at Montpelier. The stately portraits in oil upon the executive walls looked down with ill-concealed approval upon the present Governor's selection of reading matter. In his dual choice of literature he proved their worthy successor.

We pause as the Governor, with thoughts yet upon farms and farmland and sugar orchards and silk waistcoats, leisurely reaches for the Thompson tome, and proceeds to open it at random.

Destiny had directed him to *Page 215*, to a section devoted to the economics of *Transportation* in Vermont: the present status; needs for the future; the opportunities!

Here indeed was a favored topic for His Excellency John Mat-
tucks, who you and I know had ambitions for his State.

He read at some length:

Vermont being an inland state, its navigation is necessarily limited. Indeed it is nearly confined to lake Champlain. A portion of the merchandise and the productions of the eastern parts of the state, it is true, are transported in boats upon Connecticut river, but far the greater portion of the business of those parts is over-land to Boston. The mercantile connexions on the west side of the mountains are mostly with New York, and most of the business of the north western section of the state is transacted through lake Champlain, the northern canal and Hudson river. Previous to the opening of the Champlain and Hudson canal, in 1823, Montreal and Quebec shared largely in the business of this section, but, since that event, the business with Canada has been comparatively trifling. The opening of that canal not only changed the direction of business, but gave to it a fresh impulse throughout the whole valley of lake Champlain. The amount of business and of the shipping suddenly increased, and has been going on increasing from that time to the present. The whole number of vessels now in service upon lake Champlain, including steam boats, sloops, schooners, and canal boats, exceeds 100, with a tonnage of perhaps 8000 tons, and more than two thirds of these are owned in Vermont. According to the returns made by the collector of the district of Vermont, on the 30th of September, 1838, there were at that time belonging to Vermont, four steam boats, seventeen sloops, fifteen schooners, and thirty one canal boats, being 67 in the whole and rated at 4250 tons.

Here were words calculated to stimulate imagination! Lake Champlain with its commerce and trade; the Connecticut River Valley with its outlets to Boston and to salt water and to the world!

Mattocks had had contact with this lake traffic since before the Champlain Steamboat Company was formed in 1815, with Captain Sherman's famous *Phoenix*, launched at Vergennes. The vessel burned on September 5, 1819. The Governor had been one of 13 directors of the Vermont State Bank; had borne the rank of Brigadier General of the Vermont State Militia; had been in a position to know what was going on, what progress was being made by Vermonsters. Yes, he recalled well the old *Phoenix* of 25 years before. The mountain foliage was at its height of beauty the night she burned to the water.

Now the palatial steamboat *Burlington*, built in 1837 at a cost of \$75,000, cleaved the blue waters of the lake at unheard speed: 15 miles per hour. Little wonder, because her puffing engines had the power of 200 horses!

Travel on Lake Champlain had its magic.

"There was a bill," mused the Governor, "in the present session, providing charter for a *proposed rail road* that would connect Lake Champlain with the Connecticut River. It would give channel for traffic across our mountains, in just such manner as would meet Vermont's hopes and aspirations.

"It is *Senate Bill No. 16*, introduced on October 23 by Ebenezer N. Briggs of Brandon, one of our three State Senators from Rutland County. I find it is entitled 'an act to incorporate the Champlain and Connecticut River Rail Road Company,' and that it was read twice and referred to the Committee on Roads and Canals.

"Further report shows me that on October 28: 'The Senate took up the engrossed bill (*S. 16*) entitled "an act to incorporate the Champlain and Connecticut River Rail Road Company." And it was read the third time and passed.'"

Sunset rays from a western sun, now late in this November afternoon, played among the high branches of the wineglass elms. The Governor could see the reds and purples and golds of a glorious autumn sky standing sentinel above Vermont's beloved foothills and mountains.

He could hear his great clock tick out the seconds and minutes. Despite excitement within the State Capitol whenever both houses of the legislature are in session, there was welcome quiet within the Executive Chamber—and the Governor was vouchsafed pause for welcome

contemplation. Somehow, the beauty of sunset and the peaceful pursuits of his friends the squirrels lent their calming influence.

A knock at his door broke the brief spell of enchantment.

Eight gentlemen of the state government, each well known to Vermont, wished to gain audience with His Excellency. They were bound on a mission of promise for their State.

The group were these: His Honor *Horace Eaton* of Enosburgh, Lieutenant Governor and President of the Senate; *Henry Hale* of Burlington, Secretary of Civil and Military Affairs; *De Witt Clinton Clarke* of Brandon, Secretary of the Senate; the three Rutland County Senators: *Ebenezer N. Briggs* of Brandon, *Alanson Allen* of Fairhaven, and *Elisha Allen* of Pawlet; the Speaker of the House, *Andrew Tracy* of Woodstock; and, lastly, *Luther Daniels*, member of the House from the City of Rutland and likewise one of three trustees of that Vermont community.

"*Gentlemen*, you will please to enter," called the Governor, "this Chamber is open to all Vermonters—upon whatever business."

The eight filed into the twilight-lit room, and it dimly could be observed that DeWitt Clinton Clarke bore a state document, embellished by The Great Seal.

The Secretary of Civil and Military Affairs was spokesman:

"Within the hour, Your Excellency, came a message to the Senate, from the House of Representatives by Mr. Merrill, their Clerk: '*Mr. President*—The House of Representatives of the State of Vermont concur with the Senate in passing the Senate bill entitled: "*(S. 16)*. *An act to incorporate the Champlain and Connecticut River Rail Road Company.*'"

"And because of the importance of this charter in its bearing upon the future economic life of our State and in its relationship to our transportation and the further development of our natural resources, this group present have deemed it expedient and proper that in person we shall present it to Your Excellency for approval and signature. Mr. Clarke will hand over the document."

The Governor, bidding the group be seated, called for lights and that the hearth be kindled. Soon the flicker of candles and of whale oil lamps and the crackle of blazing logs brought cheer to this state scene where executive approval was about to be given to legislation which would be far-reaching in the economic life of a proud New England commonwealth.

What DeWitt Clinton Clarke, Secretary of the Senate, had handed

His Excellency proved a document of some dozen pages. Spectacles adjusted upon the gubernatorial nose gave vision of no fewer than twenty-one sections to the Act. The Governor read intently, while his audience of eight composed themselves at ease in the firelight. Stillness fell again upon the Executive Chamber.

"I observe," began the Governor, "that 'all rights are to be given to this Company to construct a rail road from some point at Burlington, thence southwardly through the counties of Addison, Rutland and Windsor or Windham, to some point on the west bank of Connecticut river, as such Company shall designate; for the transportation of persons and property by steam or horse power.'"

"It occurs to me to call attention that The Baltimore and Ohio Rail Road, after long trial, has abandoned horse power, in favor of *steam*. Undoubtedly the Vermont engineers are familiar with the facts."

"I note wise provision in Section 2 'If said corporation shall not, within seven years, commence the construction of said rail road, and expend thereon at least the sum of five thousand dollars, and shall not, within fifteen years, complete and put in operation said road, then said corporation shall cease and this act become void.'"

"Section 3 tells us 'The capital stock of said company shall be one million of dollars, which may be increased to an amount sufficient to complete said road and furnish all necessary apparatus for conveyance . . .'"

"The proposed route appears appropriate, as set forth in Section 4, 'commencing at some suitable place at Burlington, thence extending through the counties of Addison, Rutland and Windsor or Windham, by way of Vergennes, Middlebury, Rutland, Shrewsbury and Mount Holley or Weston, to such point on the west bank of Connecticut river as is deemed expedient . . .'"

"It is my satisfaction to discover, in Section 10, that the *economic* considerations have not been overlooked. I read 'Toll is granted for the benefit of said corporation upon all passengers and property which may be conveyed or transported upon such road, at such rate per mile as may be established from time to time by the directors . . .'"

"The charter is explicit in respect to levy of tolls. Section 11 provides 'The directors may erect toll-houses, establish gates, appoint toll-gathers, and demand toll upon such road, when completed, or upon such parts thereof as shall from time to time, be completed; and shall keep just and true books and accounts of all expenditures made in

building and keeping in repair said rail road, and also of all the income arising from said road, which book shall at all times be open to the inspection of any committee of the Legislature, or of the Supreme Court; and any such may examine the officers of said corporation, under oath, touching the receipts and expenditures of said corporation.' ”

“That our Vermont public shall at all times be made conversant, Section 12 provides that ‘Said corporation shall keep constantly exposed to view, at all places where they have toll-houses or gates, and at all public places where they receive passengers or freight, a sign, or handbill, with the rates of toll legibly written or printed thereon.’ ”

“Proper protection for the owners is assured in Section 13 ‘If any person shall wilfully, maliciously, or wantonly, obstruct the passage of any carriage on said road, or in any way injure or destroy said road, or any part thereof, or anything belonging thereto, or any material or implement, employed in the construction thereof, he, or any person or persons assisting, aiding or abetting in such trespass, shall forfeit and pay to said corporation, for every such offence, treble damages . . . ’ ”

“Those who have drafted this Act have peered into the future by their inclusion of Section 20 ‘Nothing in this act shall authorize said company to construct a rail road in the valley of Connecticut river, so as to interfere with the construction of any other rail road that is now or may hereafter be authorized to be made in said valley, nor to prevent the crossing of any other rail road chartered by this State.’ ”

The Governor of Vermont ceased reading. Black night had fallen without. Each squirrel had sought and gained his chosen treetrunk nest. The candles spluttered low; and embers on the hearth gave token that the great clock had ticked full many measures of time. The Governor was in meditation with his thoughts.

At last he broke silence:

“We have in this *charter act* a pioneer venture in Vermont’s transportation. The completion of this rail road will be fulfilment of a cherished dream and hope. Lake Champlain will become wedded to the waters of Connecticut river, and, by further bands of iron, with the waters of the Massachusetts-Bay and of the very Atlantic itself. We are making history tonight—for Vermont!”

“Reach me, *Gentlemen*, my writing quill. I do hereby approve a far-reaching Act of the Vermont Legislature.”

RAILROAD RECORDS AND LOCAL HISTORY¹

By RICHARD C. OVERTON

Professor of History, Northwestern University

IT may seem superfluous and even presumptuous to begin this discussion with the usual definition of terms. Certainly there should be little doubt among us as to what we mean by local history, since that is our common stock in trade. Perhaps we can subscribe without further debate to the statement with which George Morgan prefaced the local history of Harrisburg that he compiled in 1858. "The object of this work," he said, "is to rescue from the ebbing tide of oblivion all those forgotten memorials of unpublished facts and observations, or reminiscences and traditions, which will serve to illustrate the *domestic* history of Harrisburg, past and present."

There is, indeed, much food for thought in this delightful definition, and I am by no means bold enough to inquire too deeply into the nature of local history before this distinguished company. But a few additional and very elementary observations may be appropriate. One of them can perhaps best be summarized by the old story of the Vermont farmer who tilled but a small portion of his hilly, rock-studded farm. Despite his modest needs for land he kept buying adjacent fields and woodlands until the curiosity of his neighbors finally overcame their reticence and they asked him why. "Because," he said, "I don't want anybody's land joinin' mine." As nearly as I can discover, local history is like that. It begins at one specific place but there's no telling where it stops, nor should anyone worry over that detail so long as it doesn't stop too soon. Professor Malin of the University of Kansas has just published an enlightening book entitled *Winter Wheat in the Golden Belt of Kansas*. I suppose that would be called, among other things, local history. But, as his publisher truthfully says, "although the book deals with only a small area of the Middle West and with a limited agricultural situation, it is nevertheless more than a purely

1. Extracts from a talk made on November 10, 1944, in Harrisburg, Pennsylvania, before the American Association for State and Local History.

local study. The implications in the volume are broad; and from the record contained in the book, deductions bearing on the whole plains area can easily be made." Local history, then, not only illumines domestic events for the benefit of the local citizenry (as Morgan sought to do in his Harrisburg history) but furnishes the grass-roots examples of trends that affect far more than the most generously-bounded local area. It provides a microcosm of the world at large and, at least in its implications, has, and should have, no boundaries.

I should like to make one other closely related observation. As local historians we are, to be sure, pleased and possibly surprised to know that the first locomotive to turn its wheels in Harrisburg was the famous English-built engine "John Bull." But I submit that it is of greater importance and interest even to the historian of Harrisburg that this locomotive served as the model for the first Philadelphia-built locomotive, "Old Ironsides," which started Matthias W. Baldwin on his notable career. I assume, in other words, that the so-called local historian does more than compile strictly domestic facts and provide examples of broader trends (which he might do unwittingly!). I assume he tries also to be constantly aware of the background of his subject so that he will recognize these broader trends when he meets evidence of them and establish whatever relationship may exist between them and the specific events before him.

Let me summarize for a moment: I believe and shall assume that as local historians we are concerned with (1) gathering facts of domestic interest, (2) providing specific examples of given general movements or institutions, and (3) delving into the broader background of local events so that we may put them forthwith into their proper historical relationship. I propose now to serve these assumed interests in reverse order, considering the last-named first. Rather than proceed directly to a discussion of "railroad records," then, let us try (1) to define, rather sketchily, the complex organism that we lump within the single word "railroad" and (2) to illustrate various ways in which local history has been affected by railways. Then, perhaps, we shall be in a position (3) to suggest what records are of interest to the local historian, what shape they are in, and where they may be found.

We might adopt as the passport for our excursion into local railroad history a sentence uttered by Franklin D. Roosevelt in Salt Lake City on September 18, 1932. He said at that time in reference to the railroads: "No single economic activity enters into the lives of every individual as much as do these great carriers." This statement is, I think,

as true today as it was twelve long years ago. Similarly, it has been true ever since railroads became the chief agency of inland transportation.

Suppose we wander northeastwards to New England. Some years ago Lewis Stilwell wrote a fascinating book entitled *Migration from Vermont*.² I am particularly interested in this volume because it is one of the few which relates what happened back East when the westward movement was at its height. During the 1850's along with other northern New England states, Vermont was feeling acutely the loss of many of its most vigorous citizens. It was expected that the construction of railways would remedy the situation by creating inducements to remain at home, but as Dr. Stilwell says, "the hoped-for railroad prosperity proved to be a somewhat equivocal blessing." Some towns, to be sure, which had the fortune to become railway junctions flourished, while other prosperous centers were left high and dry by the shift in trade routes. In 1857 several railway companies failed during the depression to the discomfiture of many persons who had invested their savings in them. On the other hand, the railroads practically doubled the activity in the lumber industry and provided the slate and marble quarries with new and cheap transportation. They also brought in cheap products from the seaboard manufacturing centers, reducing prices for the community but often visiting hardships on local producers. The railroads also were responsible for an entirely new industry, the summer hotel business. According to Dr. Stilwell the phase of life that felt the railroad industry most palpably was agriculture. "The cost of marketing produce," he says, "was cut in half permitting many towns to export for the first time such bulky articles as potatoes at a profit. Farm values rose about fifty percent in the vicinity of the railway lines." Yet, as the author sadly concludes, despite these various benefits there was "one black mark" against the railroads. They consistently advertised cheap rates and easy passage to the West and consequently so facilitated migration from the state that the exodus assumed mass proportions.

Here indeed, in this one decade in a relatively limited area, the coming of the railways produced a variety of effects. Production, marketing, and finances were affected directly, and an important social trend was measurably accelerated. Incidentally, Dr. Stilwell has given us a

2. VHS *Proceedings*, Vol. V, No. 2, June 1937. This out-of-print study will be re-issued in book form, extensively illustrated with maps, as Vol. V of the series *Growth of Vermont*. 200 pp., folding maps, index, 8vo, cloth, \$3.00. Publication date August 1.

noteworthy example of how to relate railroads and their effects to local history; he has known where to look for their records and he has skillfully integrated their influence with major national trends.

The point, I hope, is clear. *Railroads do affect and always have affected local history in countless different ways.* In fact, I think it may safely be said that no local history for the period since the railways were first projected can be written without taking them and their effects into account.

But having considered the nature of railroads and their effects on local history, let us now turn to their records, with the hope that our discussion up to now has helped us see what *kind* of record we should like to have. Where are they? How can we get at them?

I assume that all of us are familiar with the standard works on railroads, both monographic and general, and that we are acquainted with the principal public sources. Hence I shall merely summarize the nature and whereabouts of this body of information.

There is as yet no one thorough general history of railroads although there are some incomplete treatments and more than 30 major systems have been the subject of one or more fairly comprehensive volumes. In addition there are three or four dozen good monographs on various phases of railway history, and countless miscellaneous histories—especially of the local variety—devoted in part to the subject. The *Bulletin* of the Railway and Locomotive Historical Society, *Trains* magazine, and the *Railroad Magazine* consistently carry accurate historical articles, though only the first is documented. In addition, federal, state, and municipal records and newspapers yield a mass of detailed but often undigested material. The best single guide to this literature is the Bureau of Railway Economics' pamphlet entitled "The Railroads' Library" published in Washington in 1942 and available on request. Obviously much of the material described in this guide either is primarily national in scope or pertains to individual roads, but items of local significance may, with patience, be winnowed out.

So far as I know, local items, scattered the length and breadth of the country, are not listed in any one place although you will find clues to a vast amount of source material in the university libraries at California, Chicago, Harvard, Illinois, Maryland, Michigan, Pennsylvania, Princeton, Yale, and Stanford. In addition, the Public Library in New York, Huntington in San Marino, John Crerar, Newberry, and the Museum of Science and Industry in Chicago, the Library of Congress, the libraries of the Bureau of Railway Economics and the

Interstate Commerce Commission in Washington and the Public Archives in Ottawa will richly repay the diligent searcher. The members of the informal Lexington Group, with which you may be familiar, can also help you locate material.

Perhaps the safest way of finding out where to look, however, is to read Part I of Donald Parker's excellent *Local History* recently distributed by this Association to its members. The first 86 pages of his book tell where materials for local history may be found, but I must warn you that to follow his advice will require patience, perseverance and just plain plodding. Also, I should like to add one word of emphasis to Mr. Parker's suggestions. Among other things he draws attention to private letters which, in the field of railroad history, may be of utmost importance. There have always been a few key men connected with any major development. You will, of course, find something about them in public sources, but I urge you to find out whether they left any private papers and if so, whether you can see them. If you are successful, you may find additional and sometimes controlling reasons why this or that was or was not done, and after all that is the chief thing that any historian wants to determine. Incidentally, such a key person may or may not have been officially connected with the railroad in question. He might have been a promoter, a banker, a municipal official, a labor leader, or just some interested citizen. Particularly in the case of local history, events have often been determined by one or more dominant personalities. They must not be neglected.

Another possible source of material should be mentioned here. Very little attention has been given, by the writers of railroad history, to the official records of labor organizations. Quite frankly I do not know how complete, voluminous, or accessible such records are, since my own researches have been primarily in the early railroad era. But anyone doing extensive work in the years since 1880 should certainly consult such data if he can. I should say that this would be particularly important in writing local history, for members of the local lodge are generally deeply interested in whatever specifically affects their own community.

The primary records in the possession of the railroad companies themselves, however, are the richest source of all for the writer of railroad history.³

Generally speaking, I believe that if the trained historian presents a

3. For an extended discussion, see Overton, R. C., "Railroad Archives" in *Minnesota History*, Vol. XXIII, No. 1 (March 1942), pp. 52-6. *Editor*.

specific program of research to a railroad company and is prepared to do a thorough job, he will be well received. Particularly during the past two years rail executives have evinced a growing interest in their own past. Their histories, like that of most corporations, have too often been either neglected entirely or written without any reference whatever to the official corporate records. The results have obviously been incomplete at best and positively misleading at worst. Rightly enough, "official histories" based solely on sources approved by corporation executives are received by scholars with a good many grains of salt. But when corporate records are freely opened on the same basis as other manuscript collections they certainly must be used—along with public records—if the full story of any phase of railroading, however local in character, is to be told. Perhaps, from grimy experience, I should warn you that these records may be staggering in bulk, jumbled and scattered, torn, dog-eared, and dirty. But to the born and bred historian this is simply an added challenge.

Railroads, indeed, are as many-sided as an individual. Their histories are long, varied, and comparatively unknown, even though we have overwhelming evidence that they have affected our whole society and reached into the deepest recesses of our daily local lives in a hundred ways for more than a century. Railroads are among the most prolific of record-keepers; they have always been so. Furthermore their importance and romance has impelled men in all walks of life for generations to write about them, publicly and privately. The field is rich, the records abundant. Seek and ye shall find.

VERMONTERS

THOMAS HAWLEY CANFIELD

Among the Vermont Historical Society's primary materials relating to railroads, few are more important than the papers of Thomas Hawley Canfield. Mr. Canfield played a prominent role in the building of Vermont's first railroads, and then proceeded westward where he was, with Governor J. Gregory Smith, principal promoter of the great Northern Pacific Railroad. He came from a long line of prominent Vermonters, both the Hawleys and the Canfields having played leading roles in Vermont history from the time of the first settlement to the present.

The manuscript papers are the gift of his daughters, Marion Canfield Hadlock of Scarsdale, N.Y., and Mrs. N. Harold Camp of Glencoe, Illinois, and his son, Thomas H. Canfield of Glendale, California. One box has already arrived, and additional lots are forthcoming.

RAIL ROAD OPENING,

FROM RUTLAND TO TROY.



To J. H. Canfield Esq

You are invited to attend the Opening of the
RUTLAND & WASHINGTON RAILROAD, on the 25th and 26th of
February inst. THE Train will leave Rutland at 9 o'clock, A. M.,
for Troy, on the 25th. Returning, will leave Troy at 9 o'clock,
A. M., for Rutland, on the 26th.

MERRITT CLARK, JOHN BRADLEY, T F STRONG, D S MILLER, J W BALDWIN, HORACE CLARK, H V GRAVES,	}	Directors
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Office of Rutland & Washington Railroad,
WEST FOULTRY, February 9, 1882.

Conductors please Pass Free for this Excursion.

H. CLARK, Superintendent
Rutland & Washington Railroad.

As an introduction to the papers, and an indication of their importance, we are printing here a sketch of the life of Mr. Canfield as it appeared in History of the Red River Valley, North Dakota and the Park Regions of Minnesota, a volume not likely to be available to most of our readers. The papers themselves, as yet unassessed, will provide the most reliable guide to the relative accuracy of the sketch, at least in its references to Mr. Canfield.

EDITOR

THOMAS HAWLEY CANFIELD was brought up on a farm, rising early and working from morning to night with the men, taking his share in every kind of work until he became familiar with all the details of farm work, which, with the habits of order, economy and management then formed, have been of great service to him in after years. His early education was obtained mostly in the common schools of his native town, although he soon evinced a strong desire for something more advanced than they afforded. Accordingly, he was placed by his father at Burr Seminary, in Manchester, Vermont, at its opening in May, 1833, under those able professors, the Rev. Dr. Lyman Coleman, the Rev. Dr. John H. Worcester, John Aiken, Esq., and Wm. A. Burnham, where he remained until he was fitted for college at the age of fourteen. Notwithstanding the standard of this seminary was very high, and he the youngest pupil among 150, all much older than himself, yet he acquitted himself very creditably, taking the highest rank in all his classes. Having a decided taste for practical matters, and not desiring to enter college at this early age, he returned home to the work of the farm for two years, when he was transferred to the Troy Episcopal Institute with reference to a scientific course of study, which had a very efficient corps of instructors, among them the present Bishop of Vermont.

He was particularly fond of mathematics, and it was while demonstrating a difficult problem at a public examination in the city of Troy, New York, that he, although an entire stranger, arrested the attention of the late Bishop Alonzo Potter, of Pennsylvania, who was one of the examiners, and then the acting president of Union College, Schenectady, New York. The principal of the Troy Episcopal Institute subsequently published an arithmetic for schools, based mostly upon problems and examples which he had prepared and which were worked out and solved for him by young Canfield. President Potter became so interested in the promptness and accuracy with which he disposed of all examples presented to him that he determined to insist upon the young man having a higher and broader education, and finally prevailed upon him to abandon his idea of becoming a civil engineer and to enter the junior class in Union College in the fall of 1839. It was a very trying ordeal for him to pass through, being by far the youngest in a class of over eighty, who had had all the advantages of the freshman and sophomore years, but yet, through the same indefatigable energy and perseverance which had characterized his conduct thus far in life in every-

thing which he had undertaken, he was one of the "*maximum ten*" who came out at the head of the class. Soon after the beginning of the senior year he was summoned to Vermont by the sudden death of his father, and although strongly urged by President Potter, who, during the junior year, had taken great interest in him and offered to assist him to any position he should want after graduation, as well as by his own relatives, to return and complete his college course, he considered the duty he owed to his mother and only sister paramount to everything else, and again took up the burden of the farm, and thus, at the early age of eighteen, his business life began, which has continued constant and uninterrupted to the present day.

In addition to the cares and duties of the farm, he was active in all public matters having for their object the improvement and well-being of society. He organized a lyceum, established debating societies, and procured prominent lecturers upon various subjects (among them Colonel Crockett), which, during the winter months, called out crowded houses. About this time a new element appeared in the temperance movement, the coming out on the stage of "six reformed drunkards from Baltimore," who took the platform throughout the country, and were enabled by their own experience to portray more vividly than had ever been done before the terrible consequences which followed in the trail of intemperance. Mr. Canfield organized a series of meetings in Arlington and adjoining towns, and secured one of these men to address them as well as himself, and soon had enrolled upon the total abstinence pledge large numbers, the result of which was a great improvement in the morals of the community.

Finding the labor of the farm too severe for his slender constitution, he removed, in 1844, to Williston, Vermont, where he became a merchant, having in the meantime married Elizabeth A., only daughter of Eli Chittenden, a grandson of Thomas Chittenden, the first governor of Vermont. She died in 1848, and he subsequently married Caroline A., the youngest daughter of the Rt. Rev. Bishop Hopkins, of Vermont, a charming and accomplished lady (who is still living, and by whom he has two sons and three daughters—Emily, John Henry Hopkins, Marion, Flora and Thomas H., Jr., all now engaged in completing their education in Burlington, Vermont, at the Diocesan Church Schools and the University of Vermont.

In addition to the ordinary business of merchandise, Mr. Canfield added to it the purchase of the products of the country, butter, cheese, wool, starch, cattle, sheep, horses and everything which the farm

raised, thereby carrying out the idea of home protection and creating a home market for their produce. Here he built up and carried on an extensive business under very pleasant circumstances until April, 1847, when he removed to Burlington, Vermont, where he still resides, to take the place in the firm of Follett & Bradley, the leading wholesale merchants and forwarders in northern Vermont, made vacant by the withdrawal of Judge Follett, who had taken the presidency of the Rutland & Burlington Railroad, then in course of construction. Mr. Canfield for some time resisted this arrangement, believing himself too young and inexperienced for the important position tendered him, but finally was induced to yield to the persistent entreaties of Follett & Bradley, who had recognized in his short business career at Williston the peculiar traits in his character which fitted him particularly for the responsible position which they desired him to occupy. Their office and headquarters were at the stone store on Water street, Burlington, near the steamer wharf and railroad depot. As there were no railroads in Vermont in those days, all of the produce of every kind of the farm, mine or manufactory came to Burlington for shipment to market, and the goods for the merchants in the country, from Boston and New York, came here in return. To accommodate and facilitate this business, Bradley & Canfield had extensive wharves and warehouses, as well as a line of boats to New York and Boston for the transportation of this property both ways, their wharves also being the regular landing place of the passenger steamers and other vessels, resulting in an extensive business, requiring not only much capital, but also great care and ability to manage this part of it, which devolved principally upon Mr. Canfield. About this time, Professor Morse having brought his telegraph into practical operation between the principal cities, Mr. Canfield, in connection with Professor Benedict, the Hon. Ezra Cornell, founder of Cornell University, and Colonel John H. Peck, got up a line between Montreal and Troy, New York. Mr. Canfield visited Vergennes, Orwell, Middlebury, Rutland and many other towns along the line, getting stockholders and organizing the company, and on the 2d day of February, 1848, the first message passed:

From the City of Troy to the City of Burlington:

We do sincerely congratulate you as having become, at this early day, one of those favored communities, united by the life blood of speedy communication, and as sincerely congratulate ourselves on being able to salute, face to face the queen city of Lake Champlain.

FIRST RAILROAD IN VERMONT

But the time had come for Vermont to be invaded by railroads from Boston; one via Concord and Montpelier, and the other via Fitchburg, Bellows Falls and Rutland, were being extended across the Green mountains by two different routes to Burlington. His firm, Bradley & Canfield, with two or three other gentlemen, were engaged in building the one from Bellows Falls by the way of Rutland, which was completed in December, 1849. At the same time, in connection with George W. Strong, of Rutland, and Merritt Clark, of Poultney, they built the Rutland & Washington Railroad from Rutland to Eagle Bridge, New York, connecting at that point with a railroad to Troy and another to Albany, thus opening the first line of railroad to New York as well as to Boston from northwestern Vermont. While these were in progress Messrs. Bradley & Canfield, in connection with T. F. Strong and Joseph and Selah Chamberlin, built the Ogdensburgh Railroad from Rouse's Point to Ogdensburgh, as well as other railroads in New York and Pennsylvania. Mr. Canfield was now fairly enlisted with a fleet of boats in the transportation business between Montreal, Vermont and New York, as well as in mercantile pursuits and in the building of railroads, which at that time but few contractors undertook. In the management of these great interests Mr. Canfield formed an extensive acquaintance and gained a knowledge of the resources of the country on both sides of Lake Champlain, which gave him an experience in handling and transporting the products of the country that attracted the attention of the directors of the Rutland & Washington Railroad, and commended him as a fit man to manage its affairs, and to open and organize it for business. As soon as completed they selected him for superintendent, which he declined. But so many of his friends were interested in it, and it being a new departure in the transportation of western Vermont, he yielded to their appeals and accepted the situation, retaining at the same time the management of his former business at Burlington. Mr. Canfield afterward became president of the Rutland & Washington Railroad, and subsequently took a lease of it and operated it on his own account, being probably the first railroad in the country ever leased by a private individual. It was while Mr. Canfield had this lease that Jay Gould appeared upon the stage, and endeavored

at an annual meeting of the stockholders by *am coup d'état* to get control of the road, but he found his match in Mr. Canfield, who had anticipated his plans and completely defeated them. Subsequently, after the termination of the lease and surrender by Mr. Canfield of the road to the trustees, Mr. Gould acquired an interest, and afterward control, which laid the foundation of his subsequent notable and prosperous career.

The operating of railroads was then comparatively in its infancy, and there were few experienced men to be employed. He at once instituted a rigid system of discipline and accountability, in which at first he met with opposition; but after a time all became impressed with the justice and importance of it, and he received the hearty co-operation of the employés and directors, and thus established an *esprit de corps* among all connected with it which made the "Eagle Bridge Route" celebrated for its promptness, speed and regularity, its accommodation to the traveling and business public, and its employés as among the best railroad men in the country.

Heretofore it required two days for the mails as well as passengers to go between Burlington or Montreal and New York. Mr. Canfield first proposed to make a day line between the cities. He went to New York to enlist Governor Morgan, then president of the Hudson River Railroad, in the plan, but he was coldly received by him, for the reason that the governor believed it was simply impossible. But after several interviews the governor consented to make the trial for three months, on condition that Mr. Canfield would guarantee his company from any loss. It is 300 miles from New York to Burlington, and about four hundred to Montreal, which involved an average speed of about forty miles an hour. Accordingly, on the 15th day of May, 1852, at 6 o'clock A.M., a train left the Chambers' street depot in New York, Mr. French, superintendent of the Hudson River Railroad, Mr. Johnson, superintendent of the Troy & Boston Railroad, and Mr. Canfield with two or three reporters, being all that would risk their lives upon such a crazy experiment. The train arrived at Rutland on time at 1:25 P.M., having made the run from Eagle Bridge, sixty-two miles, in eighty-five minutes, making five stops, with Nat. Gooken, engineer, and Amos Story, conductor. Burlington was reached at 3:20 P.M., and Montreal at 7 P.M. But for the fact that it had on board the New York papers of that morning it would have been impossible to have made the public believe that it came from beyond Troy. Thus was settled a question of great importance, the establishing of a daily intercourse between

Montreal and New York, since which time two daily trains have been kept up most of the time.

Burlington, previous to the advent of railroads, had been the commercial center of northern Vermont, and had been built up from the trade arising from its being the point of shipment to the New York and Boston markets of the produce of the country, and the receipt and distribution of merchandise in return. Large numbers of eight and ten-horse teams from Woodstock, Northfield, Bradford, St. Johnsbury, Hyde Park, Derby Line, Montpelier and other places, with their loads of starch, butter, cheese, wool, scales and manufactured goods, kept up a lively business with the interior, bringing to Burlington much money to be exchanged for flour, salt, iron, steel, nails and other merchandise. In addition to this the lines of boats running to Troy, Albany, New York, Montreal, and all points on the lake, created an active and prosperous business for Burlington, and it became a very thriving and beautiful town.

When the question came up of connecting by railroad Boston and Burlington, two routes were proposed, one via Montpelier and Concord, and the other via Rutland and Fitchburg. There was much difference of opinion among the citizens which would be most for the interest of Burlington, or in other words, which would injure it the least, or least interfere with its already prosperous business. Public meetings were held, much excitement and feeling prevailed; one party, headed by the old established house of J. & J. H. Peck & Co., advocating the Vermont Central route via Montpelier, of which Governor Charles Paine became president, and the other party, represented by Bradley & Canfield, urging the Rutland line, of which Judge Follett became president, who maintained that as Burlington had always derived its business more or less from eastern and northeastern Vermont, and parts of New Hampshire adjacent, that a railroad from Boston, penetrating these sections, would divert the trade direct to Boston, and thereby injure Burlington correspondingly; while from the south Burlington had never had any trade, the connection with market from that portion of Vermont being made directly with the different shipping ports on the lake, and hence it was evident that while Burlington had nothing to lose, but everything to gain by opening a trade with the towns of western and southern Vermont, at the same time the line to Boston would be shorter than by Montpelier, and, besides, a connection could be made at Rutland with railroads to Troy and Albany, and thus have a direct rail communication with New York and the West in the

winter as well as in the summer. The result of this controversy was the building of both lines, which was greatly accelerated by the powerful aid and influence contributed by the two contending parties, and on the 18th of December, 1849, the first train from Boston via Rutland came into Burlington, and on the 25th day of the same month the first train via Montpelier arrived at Winooski, the bridge over the river at that place not being finished to admit it to Burlington. With the advent of the Vermont Central train the fine ten-horse teams of Governor Paine and others ceased their trips forever to Burlington, and the elegant and celebrated six-horse teams and coaches of Cottrell and Shattuck, of Montpelier, took their departure for the last time, as had before much of the business from that part of the State; and the prostration and decline of Burlington began, and stagnation in business reigned supreme, as Bradley & Canfield had maintained would be the case if the Vermont Central line was built.

Originally, to counteract the injury to a certain extent which might arise to Burlington from a diversion of its business by the Central line, it was contended by its friends that, its terminus being in Burlington with its shops, offices, etc., new business would be created to offset in part the loss of the old. It was also understood that an independent railroad should be built from Burlington north to Canada to accommodate both the Boston lines, which were to make their termini in Burlington. But the excitement ran so high during the building that Governor Paine, after becoming sure that his line would be built, gave up coming to Burlington, and arranged, with the aid of John Smith and Lawrence Brainerd, of St. Albans, and Joseph Clark, of Milton, three of the shrewdest and most capable business men ever raised in Vermont, to make a line north from Essex Junction, thus practically extending the main line of the Central to Rouse's Point, leaving Burlington at one side to be reached by a branch of six miles. This move gave the final blow to Burlington, and left the Rutland Railroad without any rail connection north, and forced it to make its connections with the Ogdensburgh and Champlain and St. Lawrence Railroads to Montreal, at Rouse's Point by boat. To meet this emergency, as the Rutland Railroad Company had not the right by its charter to build boats, Bradley & Canfield came to the rescue, and within ninety days, early in the spring of 1850, constructed four barges of the capacity of 3,000 barrels of flour each, and the steamer "Boston" to tow them between Burlington and Rouse's Point; and this enabled the Rutland line to compete successfully for the western business with the Vermont Central.

FIRST CARGO OF FLOUR BY THE ST. LAWRENCE ROUTE

Previous to this, as early as 1847, Mr. Canfield felt that a change in the character of the business at Burlington was inevitable so soon as the railroads should be completed, and to supply what would be destroyed new branches would have to be built up. All the flour and salt heretofore, for northern Vermont and New York, came from Troy and Albany by canal via Whitehall, while that for the rest of New England, after passing through the Erie canal, found its way to Boston and other ports either by water, by way of New York, or by the Boston & Albany Railroad to the inland towns. He thus early took the ground that, with the new proposed lines of railroads completed between the Atlantic and River St. Lawrence, a new route would have to be opened by that way and the upper lakes to the wheat regions of the West. Upon consultation with leading forwarders at Troy and Albany, a movement of this kind, he found, would incur the hostility of New York and all parties interested in the navigation of the Erie canal, which at that time was the main channel of transportation between the lakes and Hudson river. But Mr. Canfield, nothing daunted by such intimations, went in the spring of 1848 to Montreal, and laid his views and plans for a northern route before Messrs. Holmes, Young & Knapp, the most prominent merchants in Canada, and who carried on an extensive business with Cleveland, Detroit and Chicago in wheat, flour and pork. They concurred with him in the desirability, but not the practicability of the scheme. From thence he went up the St. Lawrence river, stopping at Ogdensburgh, Kingston, Sackett's Harbor, Oswego, Rochester and Buffalo, to Cleveland. Here he met Messrs. A. H. & D. N. Barney, who were engaged in boating on the western lakes, and who have since become so prominent in the railroad and express business in New York City, and engaged them to send a vessel with a load of flour to Montreal, which he purchased on his own account. This vessel, although passing the locks in the Welland and St. Lawrence canals to Montreal, was too large to pass those of the Chambly into Lake Champlain, and hence Mr. Canfield had to unload the flour at Montreal, and after much trouble with the custom-house officers transferred it by ferryboat to La Prairie, nine miles above Montreal, on the opposite

side of the St. Lawrence, thence by rail to St. Johns, at the foot of Lake Champlain, and then by steamer to Burlington. This was the first cargo of flour ever sent from Lake Erie to Lake Champlain via Welland canal and St. Lawrence river, and the entering-wedge which Mr. Canfield then believed, and still believes, to a great water communication from the west end of Lake Superior to Lake Champlain, by which steam vessels of much larger size than any now on the lakes, will make the whole passage without breaking bulk, and ultimately going through to New York by the conversion of the Champlain canal between Whitehall and Troy into a ship canal. Although it was an expensive experiment, yet it showed that there was another route than that by the Erie canal, which was sooner or later to be developed into an important one. The next season Bradley & Canfield, in order to more fully demonstrate the practicability of their new route, chartered the steam propeller "Earl of Cathcart" to run between Detroit and Montreal, agreeing to furnish at Detroit 1,500 barrels of flour every two weeks; at a fixed rate of freight, to be paid whether the flour was shipped or not; and to enable them to comply with this contract they purchased a large flouring mill at Battle Creek, Michigan, to manufacture the flour, and stationed Eli Chittenden at Detroit to attend to the shipments, and thus opened a regular trade via Montreal to Burlington the whole season.

FIRST LINE OF PROPELLERS FROM THE UPPER LAKES TO OGDENSBURGH

Meanwhile the Ogdensburgh Railroad was completed, and Mr. Canfield, still determined to carry out his original plan of opening a more practicable northern route for much of the business between New England and the West, went to Oswego and Buffalo, and after investigating more fully the operations of steam propellers on the lakes and Welland canal, made a contract with E. C. Bancroft, of Oswego, to build two propellers of full size for the Welland canal locks, costing \$20,000 each, and arranged with Chamberlin & Crawford, at Cleveland, to supply two more, with which to make a regular line from Detroit to Ogdensburgh. The Erie canal forwarders, becoming alarmed at this new departure, procured from the legislature of New York a reduction of tolls on wheat and flour, which interfered seriously with the new route, compelling a reduction of price of freight to about

actual cost. This reduction was unnecessary, as it did not alter the production, and Mr. Canfield contended that the increased production of grain in the new-developed Western States would keep pace with all the increased facilities of transportation, which has since proved to be true, notwithstanding there are now eight through lines of railroad, as well as the Erie canal and various water lines on the St. Lawrence river. Very few people at that day could be induced to concur in Mr. Canfield's views of the future development of the great Northwest, and in looking back now it is as difficult to realize why they could not. But for the broad views and almost prophetic ideas of a few such men, backed up by tremendous energy and perseverance, the great internal improvements of this country might yet be comparatively in their infancy.

The next season, 1850, opened with the line of propellers between Ogdensburgh and Detroit. But the fates were against them. One of the new ones with a large cargo ran onto a rock in the upper St. Lawrence and sank on the first trip, and another was wrecked on her second voyage, entailing a very heavy loss upon Bradley & Canfield. Others were immediately procured to take their places, and the line was kept up, so that it was demonstrated at the end of the season that with proper vessels a regular line could be supported, the result of which was the establishment of the Northern Transportation Line from Ogdensburgh to Detroit and Chicago, consisting of a fleet of ten or fifteen propellers, which forever settled the practicability of the Northern route, so that at the present day nearly all the business between northern New England and the West is done that way, either by rail or water. During the four or five years of its inauguration Mr. Canfield was the main advocate and promoter of it, and it was through his persistent efforts and repeated journeys between Burlington and the various ports on the St. Lawrence and upper lakes, and after various trials and experiments and great loss of time and money, that he saw his plans succeed and the route thoroughly opened and maintained.

CAUGHNAWAGA SHIP CANAL

But there were some obstacles which he still encountered and especially the delay and damage incident to transshipment at different points, which led him to consider the plan of a continuous water route without transshipment from the upper lakes, involving the construction of a ship canal from Caughnawaga, above the Lachine Rapids, in

the St. Lawrence river, to Lake Champlain. He had frequent interviews in Montreal with the Hon. John Young, Benjamin Holmes, Harrison Stephens, Peter McGill, Messrs. Holton & McPherson, forwarders, all of whom were men of broad views and extended knowledge of the resources of the vast West on both sides of the line. Mr. Young had already agitated the subject in Canada, and there was no man in the States or Dominion who was better informed upon the subject, or who could present it in a more convincing and magnetic manner. Mr. Canfield arranged a series of meetings to bring the scheme before the public. One was held in Burlington, August 14, 1849, which was addressed by Mr. Young, Judge Follett and Charles Adams, Esq., of Burlington, the latter gentleman entering into it very enthusiastically as well as intelligently. Another was held at Saratoga, August 21, over which General John E. Wool presided, which was also addressed by Mr. Young, Mr. Adams, Chancellor Walworth and many other prominent men from Montreal, Troy, Albany, Whitehall and other cities. A committee was appointed, consisting of prominent citizens in the States and Canada, to devise measures to carry on the enterprise. A survey was made, and it looked as though the project might be accomplished. But when the matter came up in the Parliament of Canada for a charter an unexpected resistance arose from Montreal, and although the charter was finally granted, there were so many impracticable conditions attached to it, that Mr. Young and his friends did not deem it wise to proceed under its provisions.

The fact that the large lumber trade with Canada and Michigan has grown up since at Burlington, even with the much inferior and more distant connection by the way of the Chambly Canal, demonstrates the necessity of a canal of much larger dimensions, and had the original plan of Mr. Canfield and Mr. Young been carried out, Burlington would long since have become the distributing point for the flour and grain of the West as well as lumber for nearly all of New England; the large steamers leaving Duluth and Chicago would have discharged their cargoes on the docks at Burlington without breaking bulk, thereby creating a business which would have added greatly to its population and prosperity, and made it one of the most important cities of New England. Mr. Canfield still believes that this canal will, sooner or later, be built; that the necessities of trade and commerce will demand it, and that nothing would conduce so much to the growth and advancement of Burlington as the construction of the Caughnawaga Ship Canal.

INCEPTION OF THE NORTHERN PACIFIC

While Mr. Canfield was thus engaged in these various enterprises he formed the acquaintance of Mr. Edwin F. Johnson, then perhaps the most experienced railroad engineer in America, who spent much of his time at Burlington in the stone store of Bradley & Canfield. Mr. Johnson, having been projector of the Erie Railroad in 1836 from New York to the lakes, as well as having been engaged in the construction of the Erie canal, had given much thought, and collected from army officers, trappers and traders much information relative to the belt of country between the great lakes and the Pacific ocean, and had become so thoroughly impressed with the importance of a railroad to the Pacific coast that he was constantly talking with Mr. Canfield upon the project to induce him to take hold of it. Mr. Canfield, who was then about thirty years old, became so much convinced by Mr. Johnson's arguments, as well as by his own study of the country, of the practicability of a railroad across the continent, that he resolved to make it the business of his life and devote his energies and talents to the accomplishment of it.

Mr. Canfield became immediately active in the building of the Chicago and Northwestern Railroad, and in the campaign to get the northern route selected by the government for a trans-continental railroad. During the subsequent Civil War he served as assistant to the Assistant Secretary of War, in charge of the railroads around the city of Washington. There was then only one tenuous line left in the hands of the Union forces; had this been lost, the capital would have fallen into Confederate hands like a ripe plum.

With the assistance of Senator Solomon Foote, he obtained permission for the formation of a cavalry regiment from Vermont and a commission for L. B. Platt of Colchester as Colonel in charge.

After the blockade of Washington had been raised, he returned to Burlington as general superintendent of the steamers on Lake Champlain. Immediately following the war, he was appointed a director and general agent of the Northern Pacific Railroad, which had now passed into the hands of a group of three, including Governor Smith, the president. Initial difficulties were surmounted after Mr. Canfield formed a syndicate of 12 of the

leading railway, express and transportation men of the country. Governor Smith and Mr. Canfield represented Vermont on the board, and Frederick Billings of Woodstock was later added.

Edwin F. Johnson was again retained to undertake the necessary surveys, as chief engineer, and Mr. Canfield became general manager. He was forced to spend a great deal of his time in Washington, where he enlisted the support of Senator Edmunds, General Grant, and Thaddeus Stevens (a Vermonter by birth) to obtain renewals and amendments to the charter, several times imperiled by competing interests. After obtaining a satisfactory renewal, and additional financing through Jay Cooke, he proceeded westward to begin the actual building of the line. In company with Jay Cooke, he negotiated the sale of Oregon Navigation Company to the railroad, a move which was very foresighted, for river navigation was for some time the only link between the rail-head inland and the coast itself. After the bankruptcy of the Northern Pacific in 1873 he retired to an immense farm at Lake Park, Minn., the lands of which he had acquired in the course of his explorations for the railroad. He undertook a great deal of experimental farming and breeding, and made this his principal home. He maintained his home in Burlington, also, and spent considerable time in the state.

Because of his fame as a railroader, his contributions to the work of the Protestant Episcopal Church in Vermont have sometimes been overlooked. His grandfather, Nathan Canfield, was the lay delegate to the first convention of the Diocese of Vermont, and his great-great-grandfather, Capt. Jehiel Hawley, had officiated as a lay reader of the Arlington church. He married the daughter of Bishop Hopkins, and throughout his life was one of the most active and interested members of the church.

SOME RAILROAD "FIRSTS" IN VERMONT

As Observed by the Press

First Locomotive

The first genuine Railway Locomotive in Vermont was exhibited on the Central Road at White River last Tuesday. It is to be used, we learn, in grading up the road, where the track is laid. Some of our friends enjoyed a ride of a few miles on the Central, when the Steam-horse entered our State.

Vermont Journal (Windsor)
May 4, 1848

The First Railroad in Vermont

The passenger cars of the Vermont Central Railroad run to Bethel on Monday last for the first time. There was no celebration set down on the bill, nevertheless, several of the Boston friends would come up, and a good number of the people from the neighborhood would be there to see. Gentlemen capable of judging expressing complete satisfaction with this trial of the road. If anyone doubts about there being a railroad in Vermont, and a first rate one, so far as completed, let them go and see for themselves.

Vermont Watchman (Montpelier)
June 29, 1848

We enjoyed the pleasure, last Monday, the 26th ult., of a ride in the

first regular passenger train of Railway Cars ever run in Vermont. The Vermont Central Railroad having been completed from the mouth of the White River to Bethel, a distance of 27 miles, and it having become known that the passenger cars would commence running last Monday, the friends of the Road in the vicinity, and a few friends from abroad, without any formal invitation, gathered together at White River village, all eager to try the novel experiment of a railway excursion among our green hills. Three beautifully finished cars were filled with passengers, among whom was the honorable Abbott Lawrence of Boston, who had started on a tour through the country with a portion of his family. The cars were about an hour going to Bethel, where upon our arrival, we found an extensive table bountifully spread with all the substantial comforts that could be desired. The repast over, Mr. Lawrence addressed the assembled multitude for some fifteen or twenty minutes. The Hon. gentleman seemed highly pleased with everything — with Vermont and her noble sons around him, with the generous spirit of enterprise that animated them, and above all with that portion of the Central Road over which he had just passed — so thoroughly and faithfully

constructed, and forming an important link in the great chain of railway communication that is to develop our resources and bring us into close contact with the Atlantic Border and the Great Lakes of the Northwest; so that Vermont can be called an inland state but a short time longer, so far as the term relates to the development of our dormant resources and the immeasurably increased facilities of approaching the great markets. Not only the speaker, but all present, seemed inspired with the importance of the opening to Vermont of the great future. Mr. Lawrence alluded in his remarks to the great "railway king" in England — Mr. Hudson, who has been the master spirit of railway enterprise in the old world. But this transatlantic friend, all worthy as he was, was no match for General S. F. Belknap, who rightfully won the title of "the Napoleon" of railway contractors in the United States. The compliment was well received by the assembly, who manifested their approval with much applause.

Finally, we congratulate all our friends, and especially the friends of the Central road, on the prospect before them — on the prospect of having through the very heart of Vermont one of the most thoroughly and substantially built railroads in the country. When we consider the immense difficulties and prejudices that have existed in relation to the road, too much credit cannot be given to the Contractor, and the Chief Engineer, Colonel James Moore, the result of whose joint efforts thus far, bears ample testimony to the capacity and fidelity with which each, in his own

department, has pushed forward the enterprise.

From *Vermont Journal* (Windsor) in
Vermont Watchman, July 6, 1848

Lake Champlain Crossed by a Railway Track

The grand experiment has been tried, and *the floating railway bridge* is triumphantly successful. A gentleman wrote us under date of September 4th:

The boat at the Point (Rouses Point) is in full operation and works to a charm. A train of cars passed over heavily laden yesterday in first rate order, and cars are now loaded in Boston for Montreal and Ogdensburg and are not unlocked from the time they leave Boston until they arrive in Montreal or Ogdensburg.

In addition, we learn from one of the Directors of the Central Road, that an experiment was made last week to test the bearing power of the boat; a train of seven cars with a locomotive was run upon it, and the increased draft of water was only one inch and a half. It is demonstrated then that there is not the slightest difficulty in receiving and discharging the heaviest trains on the boat. This is unquestionably the most important improvement in railway bridging that has yet been made. The cost of the boat is so much less than that of a permanent bridge and draw, that the interest on the difference saved will much more than pay the expenses of operating the boat.

Vermont Watchman
Sept. 11, 1851



"FLOATING BRIDGE" ACROSS LAKE CHAMPLAIN TO
ROUSE'S POINT, N.Y.



VERMONT CENTRAL RAILROAD, AT RICHMOND



WINOOSKI TRESTLE DURING AND AFTER CONSTRUCTION



Early Vermont railroading frequently produced spectacular wrecks. The "Vermont" running express from Rouse's Point to Burlington, Engineer Ed Shattuck at the throttle, climbs up the "Sorelle," which was drawing a stone train near St. Albans. Engineer Allen was killed instantly, but Shattuck escaped with a broken leg from having jumped in time. May 20, 1864, on the Vermont and Canada Railroad.



Locomotive No. 1 on the Manchester, Dorset and Granville R.R.
No longer running. *Courtesy R. C. Overton.*



JONAS WILDER

NOTES AND DOCUMENTS
THE JOURNAL OF JONAS WILDER,
RAILROADER

With an introduction by
COL. WILLIAM J. WILGUS

This self-revelation has a double interest, portraying as it does the human qualities we indulge ourselves in believing were peculiar to New England character, and picturing the struggles bravely met by an active figure in the creation of two of the Green Mountain State's first railways nearly a hundred years ago. Self-reliance, resourcefulness, devotion to duty and sterling integrity stand out in this record of a man whose grandfather in the War of Independence served his country on the field of battle.

Dependent on his own efforts at the age of thirteen, he had paid off his family's indebtedness by the time he was 21, and soon after he was 30 became engaged in the building and operation of the newly born Vermont Central Railroad. While thus employed he originated the use of the refrigerator car and initiated measures favoring the importation of Canadian forest products which made of Burlington a leading lumber center in America.

Switching to the Rutland & Washington Railroad as its superintendent in 1852 (in which year by that route the first passenger train was operated between New York City and Montreal, eight months after a similar international train through Vermont had been first run between Montreal and Boston), the subject of the autobiography, by freight rate concessions, was instrumental in putting the slate industry on its feet and invented the coupon ticket so essential to convenient passenger travel over a succession of independent railroads. Likewise he put the road in order and initiated the widespread use of its framed maps as advertising media.

The later years of his life were spent with the Troy & Boston Railroad; with General Burt's Boston, Hoosac Tunnel & Western ill-starred route westward; with a Virginia railroad enterprise; and with

various commercial activities of little public moment. It is worthy of note that had the Burt project been coupled with the acquisition of the West Shore Railroad destined soon to become bankrupt, the New England states would have had an open unrestricted gateway to the Great Lakes free from the fatal shallow-draft Welland Canal barrier. When the hour struck the peal fell on New England's unheeding ears.

All in all, this autobiography carries a tale of which Vermonters may well be proud, breathing as it does the basic qualities we would have our descendants emulate—probity, industry, dependability and self-control.

W. J. W.

Jonas Wilder was born in Wendell, Mass., October 2, 1813, the youngest of four boys. He comments that he "was not of much consequence for farm work, and was turned over to my mother and assisted her in place of a daughter." His father was both a farmer and a mechanic; among his many tools were those for cobbling, and the boy was able to make a pair of shoes by the time he was ten. Unable to apprentice himself to a cobbler, he paid one of the men ten dollars to let him work for him, and was soon doing a man's work. By the time he was 16 he had over-taxed his strength and was forced to give up the work. He then went "peddling notions" with a good friend, and was soon driving his own wagon, with a load valued in excess of \$3,000 in dry goods and other miscellany, though the principal items of sale were "silver spoons and silver bowed spectacles." "My experience in peddling," he reports, "was the best education I could have; it taught me what human nature was, and how to meet people, and the best way to treat men I came in contact with. I was meeting strangers daily, and it enabled me to judge men at sight." After this he was employed in retail selling, having with exceptional industry and concentration paid off all his family's debts before he was 21 years of age.

We now print, below, the portions of Mr. Wilder's journal which deal with his railroad work in Vermont.

Editor

AT this time railroad building had got a start. The Boston & Albany R.R. was built and in operation. The Fitchburg Road was running from Boston to Fitchburg. The Lowell & Boston was completed to Lowell. The Boston & Providence was running. Some disconnected roads were running between Albany & Buffalo. This was about all the

roads we had, but other roads were being constructed to make through lines. The Central Vermont R.R. had begun grading.

I was offered good pay, (\$50 a month) to take charge of the commissary and supply departments on the Central Vermont construction.

We finished the eastern division to Montpelier, Vt., but funds ran short and we had to hold up. We moved over to New York and graded 30 miles of the Ogdensburgh R.R., then the Central had raised more funds, and we came back and finished grading. They wanted to push the work and divided up into four divisions of about 12 miles each. I was placed in charge of one division, the president another, and the superintendent and engineer each a section. I still had the care of the supplies. I finished my grading nearly two months before the others. When track laying began they asked me to go into the operating department, and gave me the management of the freight, tickets, and the organization of the stations on the western division. As the track was laid to them, I was to employ the men and an agent to manage, when I moved up to the next station.

We reached the last station before Burlington, our terminal, some two and one-half miles distant, and had to wait there nearly a year to take out a deep cut. I built a temporary station beyond, which reduced the distance to one mile.

A little out of the village on the R.R. was a lime kiln with fine quality of inexhaustible lime stone, owned by Judge Underwood. He was a rather easy going business man, but very social; he often came into my office. One day I asked him to give me 15 or 20 barrels of lime and I would ship them free to the important towns on the line, such as Concord, Manchester, Lawrence, Nashua, and Lowell, and then have the station agent give them to the best builders, and to the Lowell and Pepperell Bleacheries. This he agreed to. I wrote the agents to find the price of lime at their place and write me, and if any one wished to buy, to put me in communication with them. The scheme worked and orders came in and the result was that he had to build six more kilns and gave the R.R. line nearly a \$1,000 freight per month.

Another, The Peck Co., were wholesale heavy hardware and grocery merchants in Burlington and had a warehouse on the lake dock. A schooner from Canada left with them some 16,000 feet of fine Canada pine lumber to sell; it was the best quality. Deacon Chase of Nashua came up to buy iron, nails, and some kinds of groceries; he had a sash and door factory and kept a store. When down to the storehouse, Peck showed him the lumber; he was pleased with it and the price was

very low, but said he could not buy because the freight would prevent. Peck asked him to ride over and see me; they came in and Peck made known the business. It went through my mind like electricity that if we could start a trade in that Canada pine it would add largely to our earnings. I said to the Deacon, "I will ship the lumber at your own price." He replied, "That ain't quite fair; I have no idea what you can afford; make some suggestions."

I said, "How would \$4 per thousand do?" He asked, "Will you take it at that rate?" I replied, "Yes." Turning to Peck, he said, "I will take it."

Some three weeks later a man came into my office, said his name was Barns, asked me if I had shipped some pine lumber to Mr. Chase of Nashua at \$4 a thousand. I said yes; he then asked if I would ship for him at the same rates (he was a lumber merchant). I said, yes, all you wish.

He told me he was started for Canada to buy lumber, if he could get those rates. I told him I would extend it at same rates to Manchester, Lawrence, Nashua, Lowell, and Boston. That settled it for Burlington to be a lumber market; in four years, Burlington was only third lumber market in the states.

The road had all it could handle and its competitor, the Rutland & Burlington R.R., had to come to the relief to handle the lumber; that price remained till 1863. In war time it was raised to \$5 but since came back to \$4.

I mention these circumstances to show the importance of R.R. management being ever on the watch to assist in developing new business, and do it at once. Barns Co. got rich in war time; one year they paid government tax on \$90,000 income.

We got into Burlington late in the spring of 1850. The Ogdensburgh R.R. was completed and operating. Freight began to come from the west through the Welland Canal, over the Ogdensburgh Road to Rouse's Point, and we had a steamboat that brought it to Burlington, thence by rail to Boston and all parts east.

The Vermont & Canada was nearly completed giving railroad connection with the Ogdensburgh R.R. at Rouse's Point by a bridge across the foot of Lake Champlain. The bridge was expected to be done for winter use, but there was a delay and the lake froze. But freight continued to come. The Ogdensburgh Station was filled, and the elevator filled with grain; then the big station at the lake was filled with flour, and no way of getting it across to the railroad.

The president asked me if I had men that could run the Burlington station; I told him I had. He then said he wanted me to go to Rouse's Point and get the freight over, either by keeping the ice cut to run the boat, or team it across. I found it impossible to keep the boat running, so I hired teams and sledged it across on the ice. It was a hard winter's work and cars were scarce; I could have loaded more if I had had cars. The Boston merchants had drafts coming due on the freight consigned, and to keep them pacified was worse than the work, but I succeeded and the company made me a present of \$200 extra for the winter's work.

Later the line got a black eye and they sent me west to explain and secure freight. My headquarters were Cleveland, but I visited all the lake ports and all sections. The only road running into Cleveland was Cleveland, Columbus & Cincinnati R.R.; there was not a rail into Chicago. The Michigan Central was running to Lake Michigan only, and the Michigan Southern was building. I visited all the principal towns on the lakes and talked to boards of trade; I got the freight started by chartering vessels and got up a good trade even from St. Louis; but the chartering vessels were an uncertain way. I saw there must be a permanent fleet to insure business. A commission house at Cleveland had three steam propellers and could charter eight more; they offered to make a permanent freight line and build six more if I would furnish \$100,000. I wrote the eastern road how it was and asked if they would furnish the money. They looked at it favorably, but did not decide. The House had got proposals to build the six propellers, and the day came to decide and I had not heard from the Roads. I felt sure it was the only thing to be done to save the business. The day came to decide and I screwed up my courage and told them they could have the money; they closed the contract for the six. I had taken a great risk. About a week after the Roads agreed to furnish the money and so informed me. That was a relief. I never told them of my venture, but I chartered 10 sail vessels to run the season of 1852; that made a fleet of 32 vessels and it proved a success for the line, and it finally built up the largest transportation line on the lakes.

When east my headquarters were at Rouse's Point. I was in on a vacation about the first of June. I met the superintendent one evening and suggested to him to fit up refrigerator cars. I had been studying up the matter, as St. Lawrence County was a great butter district, with fine butter, but they had to keep it till cool weather and then got only 12½ cents per pound, while such butter in fine condition was selling in Boston from 18 to 20 cents.

The supt. took onto it and ordered the master mechanic to fit up what I wanted under my direction. I advertised it at every station when it would start and that it would run every Monday, also got them to consign to a man in Boston that went from that county. I notified him.

The first car we ran had eight tons. They fitted up eight cars and they ran three and four every week. The rates were just double, but the farmers got four and five cents more for their butter than ever before. This was the first start of refrigerator cars, built and run.

While at Cleveland I was offered the position of supt. of the C.C.C. Road, by Mr. Amasa Stone, who had the control. But I had agreed to take charge of the Rutland & Washington R.R. then building from Rutland to Albany. So I had to refuse the offer, although the pay would have been nearly double. I tried to get released, but could not honorably.

February 13, 1852, I took my position as supt. of the Rutland & Washington R.R. It was not open for business but the track was laid 63 miles connecting with the Troy and Boston R.R. at Eagle Bridge. The working train was working with force to fit it for operating.

March 18th. I made my first time table for opening, but with only one passenger train each way and freight down one day and return the next.

In June I put on an express in connection with the Hudson River Railroad and connecting roads north, making daily service between New York and Montreal each way.

One of the directors was to be what is called general manager. He had no railroad experience, but took upon himself many duties that he little understood; one was to arrange freights for the slate and marble business. These quarries had begun to be developed; their existence on the line was the original inducement to build the road. This manager, like some other railroad men, started in on the principle, "I have got you and you must ship by us," one of the great mistakes in railroading. He organized on the plan of a long road with business developed; we needed more cars and engines. The company issued \$300,000 of second mortgage bonds (there were only \$200,000 first bonds) to sell, in order to buy cars and engines and finish the track. The bonds could be sold in New York for 90 cents cash, but the Boston Treasurer wanted to sell them in Boston and agreed to furnish the money as wanted. My duties were circumscribed to the running of the trains and charge of the general accounting, but he let me buy the freight cars and I built 20 refrigerator cars, in all 300; he bought the engines and pas-

senger coaches. He bought seven, we had three, seven was all we needed, but like many others at that day that acted as if there was no bottom to the railroad purse, he was proud of his engines and allowed the master mechanic to trim them up with brass, which cost much labor to keep them shining. The money was furnished as agreed, but not a bond sold. Money was obtained from banks and bonds placed for security. Four months notes, when due, were renewed with interest added or hired to take up the notes; it was like starting a snow ball in a damp snow.

About this time occurred the Schuyler fraud of the over-issue of the New York & New Haven R.R. which knocked railroad securities flat; the bonds could not be sold and it resulted in bankruptcy of our road. Slate and marble did not develop as expected, the owners of the quarries were at war with the manager, and the earnings were light, track neglected; it looked like utter ruin. Finally there was a committee appointed to try for an adjustment and start anew. They issued 1,000,000 bonds, settled with old bond-holders, gave two for one, and exchanged bonds for the notes; appointed three trustees, one in Boston, one in New York, and a Vermont lawyer to be managing Trustee; they appointed me agent and supt., no treasurer, directors or president. The Vermont man was a good man, he had no railroad experience; he knew it, and left the business to me. The whole was in a bad condition: iron rails bruised on account of neglect, bad ties, and cars and engines needed repairs and no money or credit, with only \$8,000 or \$10,000 earnings per month. To add to this, Russell Sage had a mortgage on the rolling stock of over \$100,000 to be paid by installments, beginning with \$3,000 per month and increasing every quarter till paid.

With all this it was not a bright outlook, but I had faith that the road would be paying if the business was properly handled.

First I organized by reducing the expenses as much as I could, having but two prominent officers: a master mechanic to take charge of the repair shops and employ the men—engineers and firemen; the other to take charge of the road bed and employ the men to do the work. All other business I assumed: freight and passenger business, purchasing and supervision of the general office, station agents, and conductors.

The next thing to do, I saw, was that the marble and slate business must be developed to make a success. To do this I called the principal men in the business together and asked them to make a tariff that they would be able to push their business, that their quarries were worthless

without the R.R. and the R.R. worthless without the developing of the quarries. We were really partners, and, as business men, should make a fair division of the business. It surprised them that a R.R. should make such a proposition.

They made up a tariff and presented it to me; I looked it over and was satisfied and accepted it. That ended the war between them and the railroad, and the railroad never had any more trouble. The men took hold with courage and the business increased. In other ways I helped to develop business and the earnings increased.

I then went to work to develop the passenger business. The Boston & Albany R.R. was older than the western business from Boston to the west, which was very large at that time. We had a line from Boston to Albany which was 30 miles longer, but made the same price; we got a very small share.

Then single tickets were sold at Boston to Albany; the Fitchburg R.R. conductor took up the ticket and gave his check and so on the passenger was checked through.

I conceived the idea of a coupon ticket, sold at Boston through to destination, and each road take up a coupon; it would be more easily settled between the roads and better for the passenger. I had some samples printed and started west to see if the roads west would accept them.

At Buffalo I saw the supt. of the Lake Shore and presented my plan and the samples; he readily approved of them and said you can go home, I will see that they are good to Sundown, or as far as the railroads are finished and keep me advised how far I could ticket. I arranged in the same way with the Great Western (now Grand Trunk); I printed my tickets to read from Rutland, Vt., our eastern terminal, and placed our tickets in the Fitchburg Station at Boston and the principal stations between Boston and Rutland, they selling their own to Rutland and ours to destination.

I soon found we were getting western passengers, sometimes from 10 to 15. I then got out a map of the line and advertisements and framed them, sent one of the conductors west to distribute them and arranged with the western roads to ticket back over our road in same way; the roads adopted the plan and soon we had passengers from the west, and it grew up to a large business. The Boston & Albany saw we were drawing on their passenger traffic and adopted the coupon ticket. The Fitchburg Road began to use their own tickets and put them to

stations in Maine; finally railroads in general adopted the coupon ticket.

Our business increased from \$8,000 and \$10,000 per month to \$30,000, but it was hard struggle the first year to make ends meet.

I put the track in fine condition, repaired cars and engines, and all buildings, put all in fine condition and paid off the Sage debt.

About this time Jay Gould appeared. Daniel Miller of New York held some \$100,000 of our bonds. Gould had left his tanning business, and was giving his attention to one of Mr. Miller's daughters, and Mr. Miller got him to come and look over matters. He was frequently around but did not interfere.

In 1858 I had worked so hard I was completely tired out and had to resign, but contracted to supply the road with wood and ties for three years (wood was our fuel at that time).

The managing trustee took the management and one of the station agents for supt., but he did not like it, he had law business that was better, and Gould would take his place and appoint him as attorney with a salary.

I bought a large territory of woodland about midway of the road at a small village; got my choppers and teams all organized. There being no store that was of any account to supply the men and teams, I built one.

In the surroundings were rich farmers. I thought I could sell, too, and opened October 1, 1858. November 1, I found I had sold my stock so low that I must go to market and replenish. I found that I had not room enough, and contracted for an addition. I bought a much larger stock, and the first of February I was sold low again and went for another supply. When I got back, I built a shoe shop, miller's room, and building for tin shop and stoves, which was a miniature department store and built up a business of \$50,000 a year, which for a country store was a very large trade.

I kept my wood business going till the contract closed in 1861.

The war had started and business was doubtful. I had sold on credit so that I had a large amount due me and thought I better close out and collect up. In September I began to sell out my stock at auction and closed it out except some groceries and odds and ends. The post office was in my store, and I gave up and let a clerk close out the balance and take care of the post office and I began collecting. The goods at auction brought fully retail price on account of the advance in goods.

It did not take long to collect as the customers were able to pay, and

I had reduced from \$14,000 to about \$800 and was getting from \$50 to \$75 per month. I was in Troy and called into the Troy & Boston R.R. office. The supt. asked me what I was going to do; I said I had no plans.

He said come and help me, I will give you \$100 a month, and your expenses when not at home. I thought that better than collecting and I agreed to it. I went home and laid away my books and never have since asked a man for a dollar he owed me. Some few paid, but the balance was due from persons that had but little. I thought the community had patronized well and let that balance the rest.

The Troy & Boston had twice offered me the superintendence of the road at a good salary, but their finances were in a bad shape and never had paid a dividend and I did not care to accept.

The treasurer was also general manager, and the supt. and manager did not agree. I stood in between them and when the supt. wanted to do something that he knew the manager would not accede to, he would get me to ask for it and the manager would do all I would ask for; so I had a good understanding with both; I liked my job and did not have the responsibility.

I worked out my year and continued without change of price. When the paymaster paid me for the seventh month he handed me \$150. I asked him, how was that? He said the manager had asked the committee to advance my pay. He then handed me a check for \$300—said that was back pay for that year.

About this time the supt. and manager fell out and the supt. went on to an opposition road and started a war. The manager asked me to take the place, but I suggested he appoint his assistant treasurer, who was a young man that I had formerly instructed in railroad work. After talking it over, the manager said he would if I would pilot him through, which I agreed to do. I told him that I would be more useful in that position.

The war between the roads began to get hot. One day the manager said he wanted me to take full charge of the business and take my own way.

After that he let go and gave all up to me.

It was a hard fight, but I held the business and gained on them.

I was better acquainted with connecting roads than our opponents and built up a good business so that the road paid three per cent dividends that year, the first dividends they had paid.

We had a 10 year lease of the Western Vermont, which was about

to expire, to get into Rutland for northern connection and the owners doubled the rent, which we could not pay, and Jay Gould had leased the Rutland & Washington to our competing road which would shut us out of Rutland.

I was in good standing with our competitors only in business, and I talked up a settlement and they were ready. The supt. told me after that they had lost a hundred thousand dollars in the war; we came to terms by agreeing to put all our Rutland business over the R. & W.; that was what I was after; our folks were glad to do it. That closed the war and we worked harmoniously.

The competing road (Rensselaer & Saratoga) suggested I go to work for them as the Troy & Boston was relieved of their leased road and would not need me, but I declined. Then they said, why not work for us both? You may decide how to divide the salary. I told our manager of the offer. He replied it would be a hard job, but if they will pay with us \$3,000 and you divide it, we will do it, if you desire, but you have a home with us always. But I accepted it and worked for both. It was a hard job, but all went pleasantly. My business was to look after the purchasing of their wood, ties and lumber, and any other matter that was necessary.

I worked independently, under no restraint. Then I had charge of a freight line, all rail from New York to Montreal over Hudson River R.R., Troy & Boston, Rutland & Burlington, and Central Vermont R.R.s with full control by each road to make prices as I pleased. I had a good trade.

When the Delaware & Hudson River R.R. bought out the Rensselaer & Saratoga, I quit railroading. I thought I would do something else, and bought a farm of 350 acres in Windham County, Vermont, for the timber; there was 200 acres of live old growth timber on it. I put up a steam mill. I was about three years cutting of timber, wood and ties; it was a nice, profitable job.

I had a little summer hotel in Saratoga which I had owned for over 20 years, run by a brother-in-law. He died, and the premises needed repair. I went there in the spring of 1879, repaired it and put in new furniture; it was too late to rent it, and I kept it that season. My acquaintances gave me all the patronage I could accommodate. The next spring I rented it and boarded with the parties.

About this time General Burt of Boston, a fine business man, had undertaken to make a direct line of railroad between Boston and the west: he was building from Hoosac Tunnel to Buffalo, and had it in

operation to Mechanicsville, 50 miles, and was running in connection with Delaware & Hudson, and Erie R.R.s. He was not a practical railroad man and he was dissatisfied with the management; he knew there was something wrong but did not know what.

An old friend of mine suggested that he see me about it; one Saturday he sent me a letter asking me to call that evening; he had a summer residence in Saratoga; I called and he told me his trouble and asked me if I would go and look over the road and see if I could find out what was wrong. I consented to do so, he gave me a letter that I could examine anything I wished, and told me to take all the time I desired. I soon found where I thought the trouble was. At the general office, I found the manager had three or four men with large pay that had young men to do their work while they were having a good time. The general freight and passenger agent was extravagant in his expenses when attending the monthly meetings of the freight agents of other roads, spending from \$75 to \$100 a trip, giving suppers to make himself popular. On the whole, all the business of the road was run extravagantly.

I reported to the General my view of the case. He said it had been costing nearly \$4,000 a month to run his road more than the receipts.

I arranged with him to take charge of all the earnings and act as freight and passenger agent; this was about the middle of June and I was to take charge July first, but it was not to be made public till nearly the time I was to enter on my duties, so I could arrange my plans for the business.

The General notified the freight and passenger agent the last week in June that I was to be put in charge of the general office July first.

I found one man that knew all about the business. I arranged with him to act as chief clerk and he said the young men were all right, but were poorly paid. I saw them and gave them an advance in pay, then the last day of June, I left letters on desks of those do-nothings, that their services would not be wanted. This reduced the cost of the office nearly one-half. After taking possession I started in in a safe way, looked up every place under my care and cut off expenses, but I found the superintendent was inefficient and unfit for the place, had never had any experience in R.R. work except to look up the freight cars on a large road. Besides I found he was a heavy drinker and many of the freight train men got intoxicated. This I reported to General Burt and he changed him and put my old friend that was assisting him in the construction into the other's place. My friend was a first rate man to handle

and train men and take care of the road. We found the affairs in the repair shops in bad condition; that we overhauled and put in good condition, and got all in good running order and sober men on the trains.

I attended the monthly meeting of the freight agents. There was a general complaint about delay of freight on the line between Boston and Chicago. I made it a special business to find out the cause and I pressed the matter till we saved about three days' time and became the quickest line between those two points; that increased our business and in about six or eight months we increased our freight business from 4,000 freight cars per month to 10,000, and in a year had increased our business and reduced our expenses so that we were earning net about \$4,000 instead of losing that amount, making a difference of nearly \$8,000. My friend, the superintendent, was not posted in the care of the repair shops, or in making time tables or in what trains to run. Those were therefore added to my other duties, but we worked smoothly together as one person.

After we began to make net earnings, the General gave us the surplus for double tracking the line, which we needed, our trains had increased so much.

We had built a side road to Saratoga Springs and Schuylerville, and had it in operation in about a year after I went on the road, and also was grading and bridging on west, our then terminal, and all working smoothly. But the company had to get more money to carry the work through to Buffalo. General Burt negotiated a loan of \$20,000,000 in London if the project looked favorable. The parties sent over, the engineer, and he, were to decide and were authorized to close the matter if he found it all right. The General was not familiar with rail-roading or the conditions of the country, and I was well posted, having some 25 years experience on all the east and west, the north and south lines. He therefore turned the man over to me to post up; he knew his business and closed the contract.

In the spring of 1883, the General came into my office and talked for an hour while we waited for trains, he going to New York and I to Boston.

In course of conversation, he said to me, "Mr. Wilder, our business is in a better condition than I ever expected and I have put a bigger load on you than I ought, and your pay has been too small for the work you have done and are doing. But in a short time I will see that you are well paid. We have had to economize to get along, but that loan will carry us through in good shape."

When I returned from Boston he met me and we rode together about 25 miles and talked about business; that was the last time. He went to his place at Saratoga, next night had a shock and never spoke again.

My friend and I managed the roads till the next fall, then the company put in a general manager. General Burt had a law suit with the West Shore R.R. about right of way. They were then pushing on for Buffalo and wanted to defeat our plans. Our company had some men financially interested in our road, and through them this manager was appointed at a salary of \$9,000 a year. A better man could have been employed for \$1,500. He came and began to turn every thing upside down. I saw at once what I thought his object was, which was to break down the road. My friend, the superintendent, resigned; I stayed on till he wanted some crooked work done on the books, then I resigned. He succeeded in wrecking the road, lost \$40,000 the first year and the road stopped at Rotterdam, N.Y. The British loan was canceled and the road was bought up by the Fitchburg R.R. I learned after I left that this man held \$10,000 of the West Shore Road when the bonds slumped to 50 cents; that convinced me I was correct in judging of his designs.

The following year, Mr. Wilder went to Virginia on the invitation of Dr. J. M. Bailey, both a resident of Billerica, Mass., and owner of a large Virginia plantation, to put a projected railroad there on its feet. He remained there supervising and building railroads until he was 80 years of age, always active. Both he and Dr. Bailey closed out their railway interests and retired to Billerica, until Bailey's death in 1898. He then came to Woodstock, Vermont, to reside with his sons until his death July 7, 1906, at the ripe old age of 92. One of them, Mr. Arthur B. Wilder, donor of this manuscript, has himself had a long career as head of the famous Woodstock Inn, and has independently established for himself a reputation as a gifted painter of Vermont landscapes.

A sampling from the Society's Collection of old Vermont

RAILROAD POSTERS

Montpelier & Wells River Railroad.

BARNUM

WITH THE

GREATEST SHOW ON EARTH

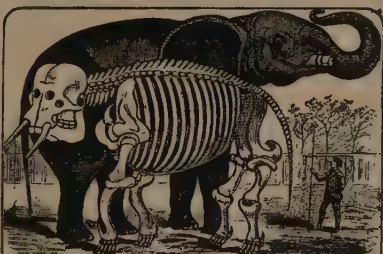
AT

MONTPELIER, AUG. 10, '82.

Tickets will be sold from stations nam-
ed below to Montpelier and return, with
UPON ADMITTING TO SHOW, at
following reduced rates, viz.

Wells River,	\$1.50
Wilmington,	1.50
South Ryegate,	1.50
Windsor,	1.40
Windsor,	1.30
Windsor Pond,	1.30
Windsorfield,	1.10
Windsorfield,	.85
Montpelier,	.75

Remember the above price includes
admission to the GREAT SHOW



(The Monster "JUMBO" as compared with the largest Elephant ever before exhibited.)

SPECIAL TRAIN

Will Leave

Wells River,	6:30 A. M.
Boltonville,	6:41
South Ryegate,	6:52
Groton,	7:02
Ricker's,	7:13
Groton Pond,	7:20
Peabody's,	7:30
Marshfield,	7:46
Plainfield,	8:05
East Montpelier (Mt.),	8:15
Arrive Montpelier,	8:35

THE GRAND STREET PARADE!

FORMS AT 9 O'CLOCK.



SPECIAL TRAIN!



WILL LEAVE MONTPELIER, STOPPING AT WAY STATIONS, AT 5 O'CLOCK P.M.

TICKETS GOOD AUGUST 10th ONLY.

W. MORSE, Gen. Pass. Agent.
Montpelier July 22, 1882.

W. A. STOWELL, Supt.

Argus and Patriot New and Enlarged Steam Job Printing House, Montpelier, Vt.

Rutland & Burlington Railroad.



Independence Day!

ODD FELLOWS, MASONS, & SONS OF TEMPERANCE

CELEBRATION!

AT RUTLAND,
JULY 4TH, 1853.

FIRE WORKS IN THE EVENING!

EXTRA TRAINS

Will be run to Rutland in the morning, and from Rutland in the evening, after the close of the Fire Works, of which due notice will be given.

When tickets are purchased at the Offices, HALF FARE will be received to and from all Stations on the Road.

Full Fare will be exacted in the Cars

JOHN S. DUNLAP,
Superintendent.

SUPERINTENDENT'S OFFICE, }
Rutland, June 20, 1853. }

GRAND EXCURSION TO KANSAS

New Mexico, Colorado,
AND
PRINCIPAL POINTS IN THE WEST!
LEAVING

MONTPELIER,
Friday, October 5, 1880.

REMEMBER THE DATE.

LOW RATES
FIRST-CLASS ACCOMMODATIONS.

Express Trains to Destination!
BAGGAGE CHECKED THROUGH

One can join this Excursion anywhere along the line of the
Montpelier Railroad, from any part of the New England States.

TO SOUTHWESTERN KANSAS!

See the rich and fertile lands in the Arkansas Valley the Garden of the West

HEADS and TIMBER CLAIMS for the MILLIONS!

Looking for a location, go to the Rich Mining
Colorado or New Mexico, where WAGES are HIGH and
MONEY PLENTY.

Kansas Valley is the Best Stock Country
IN THE WORLD

Shown Excursion Agent, L. H. CORSE, who has spent
years in the West, will accompany the excursion and
see to the wants of the PASSENGERS.

Going to any POINT in the WEST be sure and go by this Excursion and
SAVE MONEY!

Gold to all Principal Points in the WEST!

Trains WILL LEAVE MONTPELIER MONTHLY, UNTIL FURTHER NOTICE.

For information, apply in person or by letter to

L. H. CORSE,
Excursion and Lead Agent,
MONTPELIER VT

S. L. HOWE,
General Western Ticket Agent,
MONTPELIER VT

GREAT RAILROAD MEETING!

A meeting of the citizens of Whitehall will be held at
Hall's OPERA House!

WHITEHALL, N. Y.,

Thursday Evening, May 24, '77

TO CONSIDER THE PROPOSED
NARROW GAUGE RAILROAD!

Between this place and Brattleboro

Addresses will be delivered by

B. D. HARRIS, ESQ.,
OF BRATTLEBORO, VT., AND
J. L. MARTIN, ESQ.,
OF LONDONDERRY, VT.

The Ladies are especially invited to be present. The
Gallery is reserved for them.

The Whitehall Cornet Band will furnish the Music
Let there be an enthusiastic attendance at the discussion
of this measure of such vital importance to our community

BY ORDER OF MANY CITIZENS.

Whitehall, N. Y., May 24, 1877.

1874. TAKE ONE! 1874.

NEW SHORT LINE
TO AND FROM

New York, Albany, Troy, Saratoga, Lake George,
Lake Champlain, Burlington, and the

WHITE MOUNTAINS!
VIA

MONTPELIER
AND
WELLS RIVER
RAILROAD.



Saving a distance of 61 miles from Lake Champlain to the White Mountains.



RAILROAD BRIDGE OVER THE LAMOILLE RIVER, GEORGIA,
ON THE VERMONT AND CANADA R.R.

VERMONT BOOKSHELF

THE PAST OF NEW ENGLAND'S RAILROADS AND THEIR ENVISIONED FUTURE

THE FORMATION OF THE NEW ENGLAND RAILROAD SYSTEMS, A Study of Railroad Combination in the Nineteenth Century. By GEORGE PIERCE BAKER. Pp. xxxi, 283. Cambridge: Harvard University Press. 1937.

STEELWAYS OF NEW ENGLAND. By ALVIN F. HARLOW. Pp. 461. New York: Creative Age Press, Inc. 1946.

VERMONT CENTRAL—CENTRAL VERMONT, A Study in Human Effort. By EDWARD HUNGERFORD, DAVID W. SARGENT, Jr., LAWRENCE DOHERTY and CHARLES E. FISHER. Pp. 104. Boston: Bulletin issued by the Railway & Locomotive Historical Society, Inc.

RAILROAD AVENUE, Great Stories and Legends of American Railroad-
ing. By FREEMAN H. HUBBARD. Pp. 374. New York & London: McGraw-Hill Book Co., Inc. 1945.

PATTERN FOR A RAILROAD FOR TOMORROW. By EDWARD HUNGERFORD. Pp. vii, 323. Milwaukee: Kalmbach Pub. Co. 1945.

Consideration of these five books is most timely, marking as they do the recent passing or near approach of the one-hundredth anniversary of the railroad era in the six New England states. For that matter, this is to be said of the nation as a whole. It is in the light of such records of what has gone before, mixed with grains of imagination, that we may, if we are wise, in some degree map our future course. World-wide change in man's works and institutions is in the air. Blind adherence to a policy of *laissez faire* in transportation is the part of madness. In this connection it will be well for the reader to recall the pages of Winston Churchill's *Coriston*, in which widespread political and financial corruption in the expansion and consolidation of some of New England's railroads is pronounced by him to be symptomatic of widespread similar underminings of the order come down to us from our forebears. As the books under review are studied, it will appear in three of them that Jethro Basses and Isaac Worthingtons in the flesh have heretofore stalked across the New England stage.

The first named three of the books, by their very nature, are particularly hard to read and understand, the last named only a little less so; but their mastery by the thoughtful, armed with energy and vision, can go far toward helping the New England states solve their leading problem. Despite its dimming luster since the dawn of the internal combustion age in the early 1920's, the steam railroad still is, and promises indefinitely to continue to be, the backbone of our means of long-haul mass transportation so essential to life itself. But this basic industry can no longer afford to postpone the infusion of new blood on which, as never before, its efficiency in the public interest depends. To the reviewer it seems that in this the hour has struck.

Professor Baker's book primarily has to do with the mechanics of consolidating New England's railroad corporations during the nineteenth century, his story ending on the eve of the New Haven road's disastrous campaign to create a monopoly in transportation in that entire region. As becomes the scholar, he has amply documented his masterly exposition of the complex relationships of the innumerable little companies which in the slow process of time were combined into a few great systems.

He brings out clearly that the Boston and Maine Railroad had its origin in a short stretch built, under another name in Massachusetts, northerly from the Boston and Lowell a year after the latter had been opened to traffic in 1835. Its extension to Exeter, New Hampshire, was but two years behind the opening of the first railroad in that state, the Nashua & Lowell, in 1838. Thereafter the Boston and Maine, by extensions and the absorption of its principal competitors, grew apace. By 1900 it was in control of the Eastern and the Maine Central Railroads reaching the international boundary on the east; the Boston and Lowell with its holdings of the Connecticut River Railroad stretching northerly from Springfield, Massachusetts, to the international border and beyond and across Vermont to a junction with the Central Vermont affording an outlet to the Great Lakes and the far West; and the Fitchburg Railroad connecting Boston with three rail outlets in the Mohawk River Valley in New York. It was at last in supreme control of the railroad situation in New England north of the Boston and Albany Railroad, barring the Central Vermont System and some branches and minor roads; its northern Vermont gateways held out welcoming hands to the traffic of the Canadian Pacific and other railroads in Quebec, as did its eastern Maine gateway to the traffic of Canadian common carriers in New Brunswick. As will be seen later, it was

not long to rest quietly unmolested after the opening of the twentieth century.

In the same year that the Boston & Lowell was opened, 1835, another rail prong from Boston was built westerly to Worcester, whence the Western Railroad was opened to the Hudson River opposite Albany in 1841-42. There traffic was interchanged with the Erie Canal water route and by ferry with the ramshackle chain of independent railroads leading to Buffalo on Lake Erie, all under the dominion of the rival Empire State, which, of the nature of things, favored its own region. It was not until 1867 that the two connecting roads east and west of Worcester were consolidated under the name of the Boston and Albany Railroad, which in 1900 was leased to the New York Central & Hudson River Railroad.

Just why New England interests failed to gain control of the railroads paralleling the Erie Canal to Buffalo, either in the 1840's when they could have been purchased cheaply, or in the 1850's after they were consolidated as the New York Central Railroad, is difficult to understand. It remained for Cornelius Vanderbilt to take this step in the 1860's. Thus Boston and much of New England were placed at a continuing disadvantage in their competition for western traffic with the more favorably placed port of New York, save as some relief could be reaped from the establishment of inferior differential routes charging lower rates around the northern shoulder of the Adirondack Mountains and through Canada via the northern Vermont gateways to the West. The same thing may be said of the failure of New England interests in the 1880's to acquire the bankrupt West Shore Railroad leading to the Great Lakes and mid-west before it, too, was taken over by the resourceful Vanderbilt in strengthening his commanding position astride the water-level route south of the Adirondacks barrier.

Unlike the Boston & Maine and Boston & Albany systems, that of the New York, New Haven and Hartford had its early starts in two widely separated locations—the Boston and Providence opened to Providence, Rhode Island, in 1835, and ultimately merged in the Old Colony Railroad; and the Hartford and New Haven in the valley of the Connecticut, opened in 1839 and extended to Springfield, Massachusetts, in 1844. It was two years later that the Connecticut River Railroad, at present a part of the Boston & Maine, started on its slow way Vermontward. Eastward and westward the New Haven lines grew in mileage, reaching lower Manhattan, New York, in 1849, and consolidated under the present name in 1872, when the Grand Central

Depot became its western terminus. Within its folds by 1900 were gathered the New York & New England, the Old Colony, and numerous minor lines; the control of the Central New England Railway came four years later. As graphically set forth in the Baker book, a violent conflict arose in 1893 between the New Haven and Boston & Maine systems for possession of the Connecticut River Railroad, in which the Boston & Maine proved to be the victor. It was then that the contestants agreed to make the Boston & Albany in the main the dividing line between their realms, though as will be seen it was not for long.

The fourth great New England system, the Central Vermont, and its predecessors experienced more vicissitudes than the other three prior to 1900. Devouring and disgorging one corporation after another, under constantly changing names, was the order of the day during the half-century that elapsed after the almost simultaneous cross-state completion of the Vermont Central and Rutland and Burlington Railroads in 1849. In the previous year, 1848, the first journey of the iron horse in regular service in Vermont was made from White River Junction to Bethel, thirteen years after the birth of the steam railroad in New England. In 1851 through rail movements via this route in part were in effect for the first time between Montreal and Boston, and in the next year between that Canadian city and the city of New York.

By 1873 what was to bear the name of the Central Vermont Railroad, today the Central Vermont Railway, attained its greatest size, embracing as it did not only its original constituents but likewise the Rutland and Ogdensburg & Lake Champlain Railroads, New London Northern Railroad, Harlem Extension, Bennington & Rutland, and several extensions and branches in Quebec and elsewhere. It held sway from New York City via its boat line to New London, Connecticut, thence northerly to Bellows Falls, and thence across Vermont by two rail routes to Burlington beyond which it had extensions to Montreal, Quebec and to Ogdensburg, New York, where connections were made with its steamship fleet operating on the Great Lakes and with other railroads leading westward. In addition to various branches north and south of the international border, it also had a route from a connection with the foregoing route at Rutland, Vermont, southerly to junctions in southwest Vermont with routes leading to Troy and Albany and New York, and at Chatham, New York, with the Harlem division of the New York Central & Hudson River Railroad also leading to the port of New York.

Despite this commanding position, the company languished, and by

the end of the century had lost many branches and the Rutland and Ogdensburg & Lake Champlain Railroads and their affiliations. Its control by then had passed to the Grand Trunk Railway of Canada. Its value to New England remained as a differential low-rate route to and from the West via northern Vermont gateways, as was true of the newly released Rutland Railroad, analogous in both instances to the outlets offered by the Boston & Maine in conjunction with the Canadian Pacific Railway.

It remains to mention a few less important lines referred to in the Baker book—the Grand Trunk Railway of Canada, opened from Portland, Maine, across a corner of Vermont to Montreal in 1853, the Delaware & Hudson River Railroad predecessor's entrance to Rutland in 1851, the Canadian Pacific's line across Maine, opened in 1889, the beginnings of the Bangor & Aroostook system in the 1890's, and lines of far lesser importance here and there. To be added is a tribute to the book for its wealth of conveniently placed illuminating sketch maps, lacking only dates of opening of the lines in each case shown; for the ingenious control charts without which it would be impossible readily to grasp a complex situation; the supporting footnotes and biographical note; and finally the ample index. By its very nature far from easy reading, the book nevertheless is a mine of source material—a reference book—which it is to be hoped will be supplemented by the author with a succeeding volume bringing the data down to date.

The book by Dr. Harlow covers the same field as Professor Baker's, continued, however, from the opening of the century to the present time. Its method of treatment, though, is different. By the use of jocularity and subtleless humor, there is an attempt to make a necessarily involved recital more palatable to the average reader, easily tired by a benumbing array of facts. The human element, it is true, is made to enter, but the characters often lack a dramatic setting, so essential to an understanding of their achievements. Descriptions and illustrations of almost every phase of railroading in the region abound and will be found interesting; many more might have been added with advantage for the enlightenment of the reader. Some errors have been noted, as for instance the misspelling of *Massawippi* (p. 273), the northern terminus of the Sullivan (County) Railroad incorrectly placed at White River Junction (pp. 266 and 271), and the Hoosac Tunnel and Wilmington Railroad included among the narrow gauges though appearing in the Official Railway Guide as standard gauge (p. 346). The volume gravely suffers from a lack of maps and footnote references,

without which the complicated situation cannot be intelligently followed, but it does have an extended bibliography and index. It includes an account of the narrow gauge lines in the region, usually neglected, but many of the minor standard gauge roads, however, are without notice.

The Harlow book tells the well known story of how the New York, New Haven and Hartford and Boston & Maine Railroads between 1903 and 1914 were brought to ruin through the machinations and revolting wrongdoings of the president of the former road and his banker backers who sought to monopolize New England's means of transportation. Out of the mess the Boston & Maine emerged independent again but crippled and deprived of the Maine Central, while the New Haven suffered losses from which it has never emerged. The plight of the Central Vermont and Rutland Railroads from other causes has been unhappy during the past forty years, although the former, shorn of the latter, has well served its Canadian owner as a means of access to New England and New York City. The one bright spot in this four decades of gloom has been the outcome of the Bangor & Aroostook Railroad expansion, so satisfactory to its investors and the public.

The *Vermont Central*—*Central Vermont* narrative well covers its special field, embodying much that appears in the Baker book, with additions to bring it down to its recent date of publication. Included in it is considerable information missing from the Baker and Harlow books, a galaxy of names of railroad leaders of Vermont origin, and a display of photographs and locomotive data of appeal to those interested in Vermont lore. A bibliography and an index unfortunately are missing.

The Hubbard book, unlike the others, is topical in its engaging presentation of many scattered incidents pertaining to railroads throughout the United States. Interspersed among its pages are twenty-three songs, poems, and ditties, and fifty-eight very interesting illustrations. Such well known characters as Casey Jones, Jesse James and Kate Shelley are made to live before us. Dramatic incidents in history are vividly dwelt upon, including the breathless pursuit of the Confederate locomotive *General* captured by the Federals in the Civil War; the devastating Johnstown Flood in Pennsylvania; the loss by storm of the Long Key Viaduct of the Flagler railroad system in Florida; famous fires in Chicago, Minnesota and elsewhere where railroads played an heroic part; trackside interments; train robberies, wrecks, and childbirths; tales of unions, strikes, and blackballing; and the dying days of the

Woodstock Railway in Vermont. Lingo of the rails and a vocabulary of railroad lingo are appended and an ample index too. Written with every evidence of the exercise of care in the compilation of anecdotes and happenings, the book is well worth reading by those interested in the human side of railroad history.

The Hungerford book last listed is a book *sui generis*, akin to Edward Bellamy's *Looking Backward* published sixty years ago. As stated in its preface it "deals with fact and theory in fiction form. It is concerned with the past, present and future in railroads and railroading. It is a Utopia, a looking backward, aimed at the railroad world—and also all of us who traffic up and down over the rails behind the iron horses."

Seen through the eyes of a fictional foreign correspondent of the *Times* of London in 1960, the railroads of the United States are described by him in letters to his editor as "One Big Railroad" that had been created under the guidance of the hero of the tale, William Wiggins of Maine, whose experience, energy, integrity, and vision had made this possible. Starting with the gathering of the New England railroads into a single system with modernized equipment and road bed, and efficient and courteous service, he organized a holding company with which to overcome the apocalyptic four horsemen, "Greed, Pride, Tradition and Inertia," who so long had ridden roughshod in the field of transportation. As the story runs, this organization drew to itself the hero's primary acquisition and other receptive systems extending across the continent from ocean to ocean and from the Gulf of Mexico to Canada.

With this combination as a nucleus, the owners of the larger systems of the country were persuaded by the proven advantage of unity to join up one by one. The assurance of a moderate though sure return on the investment won the day with the holders of the old securities, hungering for fair and honest treatment; and the prospect of up-to-date physical improvements, lessened charges, settlements of disputes around the council table, and speedy, safe, and comfortable service alike for all users of the rail facilities, captured the favor of the general public. The United States Railroad is thus reported to have been born, with its connections ultimately extending to Alaska and even Siberia on the north and to the Panama Canal and beyond it on the south.

Unlike the financing of a public corporation such as the Port of New York Authority, with one class of security on which an extremely low rate of return earned from services rendered is by implication guaranteed by the states of New Jersey and New York, that of the imaginary

United States Railroad is pictured as having been effected eventually through half and half issues of bonds and stock, of which the former bore the high rate of 4 per cent guaranteed by the federal government, and the latter whatever rate might be earned by fixing service charges at a sufficiently high level. The reviewer, as proposed by him long since in the press,¹ prefers the one class of security method with the requirement in the new system's federal charter that charges for freight and passenger service should be sufficiently high, and no higher, to defray expenses and yield a much lower return that would be warranted by such protection, say $2\frac{1}{2}$ per cent.

There is another point on which there is room for differences of opinion—the determination of policies by a board on which management, politics, shippers, and labor should be unequally represented, as was adopted in the “looking-backward” Wiggins set-up, or, as in the reviewer's plan,¹ by a co-operative, non-political board equally representative of all five elements involved—management, labor, users (shippers and travellers), investors and the public at large. In either plan the private banker in the usual sense would play no part—the four horsemen would have little chance to roam.

The book thus looking backward displays the author's marvelous grasp of the present nation-wide railroad situation, and a vivid imagination of what may be done to cure the ills from which a disunited industry and the country are bound increasingly to suffer under a continuing policy of *laissez faire*. Illustrations of tomorrow give zest to a volume which otherwise would be difficult understandingly to read—transformed cities, trains, stations, locomotives, and cars, as well as maps, timetables, and scenic views. The human element, too, gives a touch of the dramatic to what otherwise might be deemed exclusively mechanistic. William Wiggins is an interesting, even lovable figure, as are others in the story who joined with him in his gigantic enterprise in the public interest. New Englanders in particular, among them Vermonsters, will find much in the book that touches their problems and their memory of those who have gone before them in the development of their region. It is to be regretted that a table of contents, a bibliography and an index are missing in a novel in which there is so much that is historical and explanatory.

1. Letters in N.Y. *Times*, 1-30-38, 2-25-38, 10-9-38, 5-7-40, 5-29-40, 5-11-41, 8-27-41, 9-15-41, 1-25-42, 3-15-43, 3-21-43; articles in *Civil Engineering*, Oct. 1939, and other publications; also unpublished *The Railroads in Postwar Years*, 1944-45.

An unconscious comment on Mr. Hungerford's *looking-backward*, as seen by the reviewer, lies in the *looking-forward* closing paragraphs in Professor Baker's much earlier book:

That New England, however, whether for better or worse, will eventually have only one railroad system appears to the author to be as inevitable as that that system will eventually, for better or worse, become merely a part of one United States Railroad Company.

Both viewpoints envision a common end—unity in the railroad field, with its opportunities for the modernizing of plant and equipment and the abolition of inefficiency, discriminations, financial entanglements and high costs of outmoded venture capital. Standpatism has no place in their outlook for the future.

WILLIAM J. WILGUS

Claremont, N.H.

THE ROLE OF TRANSPORTATION IN THE DEVELOPMENT OF VERMONT. By WILLIAM J. WILGUS. Maps by EARLE WILLIAMS NEWTON and the author. Pp. 104. Montpelier: Vermont Historical Society. 1945. \$3.00.

The Role of Transportation in the Development of Vermont is one of those rare books which not only covers, in a readable and scholarly way, the intricate growth of Vermont's transportation, but also accomplishes the far more difficult feat of relating that specific topic to the economic, social, and political life of the state and to the national transportation framework. Colonel Wilgus' achievement in clearly demonstrating the *relevance* of each isolated fact to end results and to the broader currents of every day life cannot be praised too highly. The shelves of libraries (and particularly those devoted to technical subjects such as transportation) are crowded with monographs that expound *ad nauseam* every last detail of the immediate subject; few of these attempt to integrate their findings with allied developments, and even fewer succeed in doing so. But as an experienced railroader, Colonel Wilgus knows that no public carrier of goods or people exists in a vacuum; it is utterly dependent upon the life of the community, and affects that life in myriad ways. Perhaps that is why his study of Vermont's transportation devotes so much attention to matters of orientation and long-run significance. At any rate, he has written a book that is valuable not only intrinsically, but as a superb model for the

writing of transportation history or, for that matter, of any kind of history.

The first five chapters (covering 23 pages) are devoted to the physiographic, political, economic, and social setting; each chapter is ably supplemented by helpful maps prepared or adapted by Mr. Newton, whose devotion to the merits of visual education is emphasized by his blunt but courteous injunction to the reader (on page 64) to keep the various maps before him as he goes through the book. The chapter on physiography points out how the mountain ranges and rivers of Vermont provide natural channels for transportation, and the text is illuminated by the frontispiece map showing the relation of Vermont to the Mississippi River and Great Lakes-St. Lawrence drainage basins, as well as by a colored map showing the rivers and watersheds of the state. Chapter II describes the natural resources such as minerals, timber, and livestock; here, too, the text is supplemented by a revealing map prepared by the indefatigable Mr. Newton. Chapter III, entitled "Rival Claimants," outlines the turbulent political heritage of Vermont and synthesizes the story from prehistoric times through the War of 1812. The next chapter, "External Influences," fills in the national transportation background in as brilliant a summary of that subject as may be found anywhere within the compass of four and one-half pages. Ever mindful of the deep importance of collateral topics that might superficially appear unrelated to the story, Colonel Wilgus not only describes the development of the nation's early canal and railway network, but quite properly brings in such topics as British navigation policy, the Louisiana Purchase, the Mexican War, the Confederation of Canada, the Industrial Revolution, and the tariff. Indeed, this chapter may serve as an illustration of the way in which the author consistently places his specific topic in its proper setting. Chapter V describes the quantitative and qualitative growth and nature of Vermont's population. It is accompanied by a series of diagrams which, among other things, contradict the popular assertion so galling to Vermonters that there are more cows than people in the state. Incidentally, it is at the end of this chapter that Colonel Wilgus reaches some of his most valuable conclusions for they are not only based on experience and reflection, but strengthened by the author's New England candor and deep affection for his native state: "Two centuries of primitive means of movement from 1609 to 1809, followed by a century and a third of modern means down to the present day, have in the end, therefore, been unable to bring material prosperity to a state, isolated as it is from

contact with the sea and meagre within its borders of long-lasting natural resources for sustaining and promoting human life. Its one possession in which it is rich beyond compare, its beauty, yet lies fallow and in need of protection and enhancement in the interest of the state and nation. Transportation in the future may perhaps save Vermont from the doldrums, by making its cultural and recreational areas, if and when suitably developed, more accessible by air, and its historic waters along the western border more useful without injury to their beauty. An aging and stationary population thus may be given new life" (p. 36).

Before reaching the first chapter dealing specifically with transportation, the reader finds a double-spread land classification map of Vermont, together with statistics indicating the percentage of each county suitable for agriculture and the changes of each county in order of population from 1830 to 1940. A map of this sort is far more eloquent (as the author undoubtedly realized) than many pages of text in explaining Vermont's unique development. With Chapter VI Colonel Wilgus turns his attention to the matter of transportation and carries the story from the time of Champlain to the end of the Eighteenth Century. In addition to the map showing military routes of travel prior to the Revolution, and a map drawn from contemporary sources showing the highway system of 1791, J. Reid's 1796 map of the state is reproduced in facsimile. Chapter VII, entitled "Steamboats, Turnpikes and Canals," reports the internal struggle in Vermont—similar to those that took place in all the older states of the Union—between the proponents of these various forms of travel. As might be expected, Lake Champlain and the Connecticut River dominated the transportation situation in the early years of the Nineteenth Century even though Vermonters were among the first to realize the possibilities of hard-surface turnpikes and never relaxed their efforts to connect the two great natural waterways with adequate overland links. Colonel Wilgus not only traces the development of the various routes, but describes in welcome detail the goods, livestock, and people that passed over them. Again he demonstrates that although he is standing in the Green Mountain State, his vision stretches far beyond the local horizon. Among other things, he discusses the transportation plans of Boston, Portsmouth, Portland, Montreal, and other cities, thus relating the well-known rivalry of the seaboard cities to the particular situation in Vermont.

Chapter VIII, "Railroads in the Making," is the longest in the book

and in many ways the crux of the discussion. It is introduced by a full-page map stretching from Nova Scotia to Minnesota and designed to show Vermont's railroad connections with the rest of the nation. Shunning the seductive temptation to enlarge upon the romantic and anecdotal aspects of the state's first railway, Colonel Wilgus introduces the subject by characterizing the state as "a bridge for interregional communication" and as "a keystone in the northern arch of transportation between East and West." He then turns to a discussion of each separate system: the Central Vermont (Canadian National), the Rutland, the Boston and Maine and Maine Central, the Canadian Pacific, the Delaware and Hudson, the St. Johnsbury and Lake Champlain, and the "Minor Railroads." The story of each of these systems is brought up to about 1900, and to his everlasting credit, Colonel Wilgus includes in his discussion various portions of railways that have been abandoned. In so doing he in many cases traces a complete cycle in the transportation history of various localities. This chapter includes not only a full-page chronological map of Vermont's railway network but, as Mr. Newton urgently reminds us, is supplemented by the large colored folding map attached to the back inside cover showing the railroads as of 1944. The summary at the end of this chapter is another brilliant thumbnail sketch emphasizing Vermont's role as a transportation thoroughfare.

Recognizing that since 1900 the transportation burden has been borne by a wider variety of carriers than before that time, the author devotes Chapter IX to Twentieth Century transportation, discussing in detail railroads, highways, waterways, airways and pipelines. Maps of the principal highways and of the state's traffic flow assist the reader immeasurably.

In his tenth and final chapter the author sums up the trends and conclusions that have emerged in his discussion. With clarity and precision he re-emphasizes the role of the state as a thoroughfare, enumerates the special disadvantages of Vermont in respect to resources and topography, traces and distinguishes between the economic and social effects of the various types of carriers and, as a true Vermonter, reverts again to the greatest of all assets of the Green Mountain State, its "peerless charm and beauty." He expresses the hope that Vermont "will awaken to the rare possibility of reaping a large harvest—material and spiritual—from a possession so unique," but lest the material aspect be over-emphasized, he warns that measures should be taken "to protect its beauty by restraining the woodsman's axe in its moun-

tain forests and by saving the shores of its lovely little rivers and lakes from desecration." Always a great believer in the future, Colonel Wilgus even suggests that the airways, and perhaps in particular the helicopter, will in the future make Vermont a dynamic state, and that the improvement of all forms of transportation may bring about a cultural, recreational, and educational revival that, among other things, may reverse the tendency of Vermont's young people to leave the land of their fathers. Finally, Colonel Wilgus states what he has amply demonstrated "that transportation in Vermont . . . in all its forms . . . has had a tremendous part for good or evil in making the state what it is today. It remains for its citizens," he concludes, "in the cultivation of its beauty, to take full advantage of what lies ahead in the field of human endeavor on which all else depends—the coordinated movement of man and his products, by modern means, from place to place, with a minimum of cost and effort" (p. 94).

In a brief but informative appendix, statistics are presented for all the state's railways; they indicate the status of each road mile as to length, date of construction, and form of ownership. A second appendix indicates the types of various highways in the state and the means of their support. A bibliography of 105 items covers not only the usual but many of the obscure publications pertinent to such a study as this. Documentation, though in an abbreviated form, is entirely adequate as is the brief subject index at the end of the volume. The format of the book is attractive and the type large and easy to read.

It is seldom indeed that one finds a volume worthy of unqualified approval, yet such is the case in this instance. *The Role of Transportation in the Development of Vermont* provides a first-rate account of the state's transportation, complete but happily free from involved and irrelevant detail. As local history, it should be on the shelves of every Vermonter interested in the growth of his state and, as I have indicated above and wish to emphasize again, this book is a model of integration and perspective. Colonel Wilgus, for whom I have respect as an expert and affection as a neighbor and friend, is to be warmly congratulated on his contribution and (if I may be pardoned for a personal reference) as one of Earle Newton's former mentors in American history, I should like to give him A-plus for his part in producing this volume and in contributing to it maps of which Frederick Jackson Turner himself would be proud.

RICHARD C. OVERTON

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IT is not often that one has the pleasure of reviewing a book so good that it can be given only the highest commendation. But such is the case in my opinion about *The Role of Transportation in the Development of Vermont*. The book is well written, and its author is obviously a careful student of general local history as well as of transportation. The first few chapters are devoted to the history of Vermont, its physical characteristics and resources. Such a wealth of information is condensed into these pages that if one had no other source material relative to the state, a good understanding of Vermont's history and growth could be obtained from Mr. Wilgus' thoughtful and excellent narration. The remainder of the book is entirely given over to the subject of transportation and its direct relation to the history and development of the state. Beginning with trails of marked trees leading from one settlement to another through the wilderness, then taking up in the order of their establishment, roads, waterways, turnpikes, railroads, and finally, airways, the author shows how great a factor each of them has been in the development of the state's institutions, its population, and its wealth. It must be remembered that the book is not a history of transportation; it is, rather, a studied, short sketch of the influence of transportation upon state development. However, Mr. Wilgus has also given a brief history of the common carriers as they came along throughout the years, especially the railroads. A judicious selection of unusual and most interesting maps adds much to every chapter on the carriers and greatly enriches the whole volume. Stagecoach days are only referred to in writing of the turnpikes. It seems rather a pity that someone does not make a study and produce a history of those old rough-riding ships of the highways that for so many years served as the principal means of conveyance. The State Historical Society is to be congratulated upon having been able to secure for this undertaking a man of so much experience and ability.¹

Arlington, Vermont

G. A. RUSSELL

1. *American Historical Review*, LI, no. 3, April 1946, p. 557.

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The Role of
TRANSPORTATION
in the
Development of Vermont

by William J. Wilgus

This study was prepared to forward an understanding of the influential part played by transportation in the colorful history of the Green Mountain State. Much has been recorded of past happenings in each of the five transport agencies devoted to a common purpose, but little or nothing dealing with the subject as a whole. Separately and collectively they gave birth to events in history or were influenced by them. An interpretation of their causes and effects is the purpose of this volume.

The author first views the state's relation to the remainder of the country, its resources and physical characteristics, its trials and tribulations arising from external influences and rival claimants, and finally, the conditions which have brought about the letting up of its growth of population. Then the various types of movement are taken up in their order — primitive transport, steamboats, turnpikes and canals, railroads, and twentieth-century motor vehicles, giving weight to their interdependence and co-relationship.

Outstanding are the thirteen maps which accompany and explain the text as outlined above. The smallest are folio in size, and one, the map of railroads, is 17 x 22 inches in size, folding into a pocket in the back of the book. Some are monochrome, but most are in from two to five colors, enabling a graphic and colorful illustration of geography and transportation growth.

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